



CANSO/ACI RUNWAY SAFETY CHECKLIST

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Introduction

Runway safety is a shared responsibility at the operational level of an airport. This checklist was developed to support structure and meaningful conversations amongst airport staff, air navigation service provider staff and operators at each airport. Its purpose is to strengthen existing good practice and help us become even safer. The checklist addresses the prevention of runway incursions and runway excursions, the integrated operation of multiple service providers, effective runway maintenance and clear safety communication across stakeholders. It also promotes learning from safety events and experiences, recognising that continuous learning is central to maintaining a safe runway environment.

Ensuring effective runway safety depends on close cooperation across an array of stakeholders involved in airport and aircraft operations. This includes coordination at each airport location and between organisations at both:

The tactical level, such as:

- Flight crew
- Airside operators
- Air traffic controllers.

The strategic level, such as:

- Airlines, charters, flight schools and general aviation
- Airport authorities
- Air navigation service providers (ANSPs).

To support this coordination the Civil Air Navigation Services Organisation (CANSO) in collaboration with the Airport Council International (ACI) have developed the runway safety checklist, specifically through the participation of the ACI Asia – Pacific & Middle East (ACI APAC & MID). The checklist supports users by:

- Helping to assess current runway-safety performance
- Prompting improvements and targeted actions
- Building awareness of key factors influencing runway safety.

We designed the checklist to support operational safety discussions within local runway safety team meetings. It can also inform wider organisational or strategic reviews.

The checklist is structured into sections for air navigation service providers and airport operators. Teams may focus on the part most relevant to their responsibilities while gaining visibility of how other functions contribute to runway safety. Reviewing the full checklist may reveal shared risks or opportunities for joint improvement.

The content supports a wide range of operational contexts, from large international airports to small non-towered aerodromes. Some items will not apply in every situation though teams may choose to explore unfamiliar topics to broaden knowledge and understanding.

The checklist is not an exhaustive list of runway-safety topics. It provides a practical tool to support continual improvement and informed discussion among local runway safety teams.

How to use the checklist

This checklist is intended to support discussion at the operational level. Airports and ANSPs should use it to structure local conversations on runway safety and to inform planning for future safety improvements. It is also well suited for use within local runway safety team meetings. We therefore recommend the following approach:

- Select the section most relevant to current priorities or operational focus.
- Discuss each question as a group and agree the response based on current practice.
- Identify items that require follow-up, assign actions and agree target dates.
- Review items marked 'not applicable' to ensure the decision is justified and does not indicate an overlooked risk.
- Agree improvement priorities and add actions to the runway-safety action plan.
- Repeat the assessment at agreed intervals, or following operational change, to track progress.

Where improvement opportunities are identified, consider:

- Quick actions that can be completed locally.
- Medium-term actions that require coordination with other stakeholders.
- Strategic actions that may need organisational or regulatory change.

The checklist is most effective when it forms part of a continuous-improvement process with shared ownership across all partners.

Reference information and resources

A wide range of reference and guidance material exists on runway safety. While multiple sources informed the development of this operational-level checklist, the Global Action Plan for the Prevention of Runway Incursions (GAPPRI) is referenced within specific line items for those who wish to explore topics further or seek more detailed guidance.

Additional resources that we recommend are:

- [Global Action Plan for the Prevention of Runway Incursions \(GAPPRI\)](#)
- [Global runway safety action plan](#)
- [ICAO runway safety toolkit](#)
- [The Global Action Plan for the Prevention of Runway Excursions \(GAPPRE\)](#)

CANSO/ACI Runway Safety Checklist

ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|---------------------------------|--|-----------|---------------------------------------|
| Local Runway Safety Team | | | |
| 1 | Is there a Local Runway Safety Team (LRST) at your location? | | |
| 2 | If No to Q1, is runway safety formally included in the agenda of another airport forum? | | |
| 3 | Do the following front-line stakeholders participate in your LRST or similar forum? | | |
| | a) Pilots (from airline operators, airline association, general aviation, flight schools, military operation etc. depending on traffic types at the airport) | | |
| | b) Air traffic controllers | | |
| | c) Manoeuvring area vehicle drivers | | |
| | d) Aircraft Rescue and Fire Fighting (ARFF) personnel | | |
| 4 | Does your LRST or similar forum meet at a minimum of twice a year? (Individual aerodromes may require a different meeting frequency, such as quarterly, every other month, or on an ad hoc basis for special upcoming events or construction projects). | | |
| 5 | Does the LRST (or equivalent forum) have the following topics on the agenda? | | |
| | a) Local runway safety occurrences | | |
| | b) Runway surface condition and reporting (including compliance with the Global Reporting Format [GRF]) | | |
| | c) Planned and ongoing airport work | | |
| | d) Aerodrome signage, markings and lighting | | |
| | f) FOD management | | |
| | g) Wildlife management | | |
| | h) Unmanned Aerial Vehicle (UAV) incidents | | |

CANSO/ACI Runway Safety Checklist

ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|---------------------------------|--|-----------|---------------------------------------|
| Local Runway Safety Team | | | |
| 5 | i) Communications | | |
| | j) Local procedures, practices and publications that relate to runway operations or runway safety | | |
| | k) Lessons learnt - local | | |
| | l) Lessons learnt - external | | |
| | m) Staff Training | | |
| | n) Obstacle Limitation Surface | | |
| | o) Availability and maintenance of equipment/systems required for safe runway operations (e.g. MET systems) | | |
| 6 | If Yes to Q5(k) and/or Q5(l) above, how are lessons learnt shared with stakeholders? <i>Please refer to GAPPRI ANSP4 and ANSP5 for additional guidance.</i> | | |
| 7 | If Yes to Q5(l), What sources do you use to learn lessons from external sources? <i>Please refer to GAPPRI ANSP4 and ANSP5 for additional guidance.</i> | | |
| 8 | Do other aerodrome operators (including general aviation, airlines, airside drivers, airport, ARFF etc.) actively participate in the LRST (or equivalent forum)? | | |
| 9 | Does the LRST inform the national runway safety body to ensure consistent implementation of the runway safety programme at the national level? | | |
| 10 | Do you have a process for annual assessment of your own contribution to the effectiveness of the aerodrome LRST? The process may include: | | |
| | a) Review of the implementation of runway safety action plans | | |
| | b) Review of measures taken to reduce runway incursions and effectiveness | | |
| | c) Discussion of new initiatives | | |

CANSO/ACI Runway Safety Checklist

ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|---|---|-----------|---------------------------------------|
| Local Runway Safety Team | | | |
| 10 | d) Review of key safety measures at the airport | | |
| | e) Review of overall performance of the LRST | | |
| 11 | Are 'hotspots' for your airport identified and published to pilots, drivers and controllers? (considering that not every stakeholder group has access to the same information platforms) | | |
| 12 | If Yes to Q11, are the hotspots regularly reviewed and up-to-date? | | |
| Reporting and Learning Environment | | | |
| 13 | Do you report runway safety hazards/ issues/occurrences relating to your own organisation/the aerodrome/aircraft operators? | | |
| 14 | Do runway safety occurrences get investigated to determine why these occurred? | | |
| 15 | For runway safety occurrences, do aerodrome stakeholders such as aerodrome operators, emergency services, ANSP and airlines share data and information necessary for safety investigations and lessons learned? <i>Please refer to GAPPRI ANSP4 for additional guidance.</i> | | |
| 16 | Are the results of the investigations shared with the LRST and national runway safety body/different LRSTs? | | |
| 17 | Is the information from runway safety occurrences used in the development and implementation of programmes to prevent recurrence or enhance runway safety at your location (or elsewhere)? | | |
| 18 | Are runway safety occurrences, issues and procedural changes (local and national) briefed/discussed with all controllers? | | |

CANSO/ACI Runway Safety Checklist

ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|---|--|-----------|---------------------------------------|
| Reporting and Learning Environment | | | |
| 19 | Is runway safety included as a topic in initial and recurrent training? | | |
| 20 | If Yes to Q19, is the training module updated periodically or when issues arise? | | |
| Aerodrome Works | | | |
| 21 | Do you have arrangements with the aerodrome operator and/or other stakeholders to coordinate planned changes to manoeuvring area procedures, including work in progress or infrastructure changes? | | |
| 22 | If Yes to Q21, is the arrangement reviewed for effectiveness and updated as necessary? | | |
| 23 | If Yes to Q21, does the arrangement include the assessment of lines of sight from the tower to the manoeuvring area and identification of mitigating actions where line of sight is impaired? | | |
| 24 | Is the assessment of line of sights from the tower periodically required (outside of aerodrome works)? | | |
| 25 | When implementing temporary changes to aerodrome operating conditions, do you coordinate with the aerodrome operator to optimise the front-line operators' situational awareness? When needed, an AIP supplement with graphics and charts should be published. <i>Please refer to GAPPRI ANSP17 for additional guidance.</i> | | |
| Airside Training | | | |
| 26 | Does the aerodrome have airside driver familiarisation training? | | |
| 27 | Does the aerodrome have pilot familiarisation training? | | |

CANSO/ACI Runway Safety Checklist

ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|-------------------------|---|-----------|---------------------------------------|
| Airside Training | | | |
| 28 | Does your ANSP assist with the content development, or delivery of the training? <i>Please refer to GAPPRI ANSP2 for additional guidance on training contents and modules. For airside driver familiarisation training, please refer to communication procedure and standard phrases in GAPPRI ANSP10 and ANSP15 for additional guidance.</i> | | |
| 29 | Do you (and your ATC colleagues) complete similar aerodrome familiarisation training? <i>Please refer to GAPPRI ANSP2 for additional guidance on training contents and modules.</i> | | |
| Communications | | | |
| 30 | Do you support the aerodrome operator with implementation of procedures for airside vehicle drivers associated with standardised communication on the following topics? | | |
| | a) Radio checks and readability scale | | |
| | b) Radio communication failures (transmitting blind) | | |
| | c) The use of predefined and process-specific discrete call signs for manoeuvring area vehicles | | |
| | d) Phraseology for alerting ATC or when in doubt | | |
| | e) When a vehicle becomes lost or uncertain of its position on the manoeuvring area | | |
| | f) Position reporting | | |
| | g) Runway access and runway crossing requests | | |
| 31 | Do you use standard ICAO communications procedures, phraseology and read backs at your location? | | |
| 32 | Do all vehicle movements on the aerodrome use a radio? | | |

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ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|-----------------------|--|-----------|---------------------------------------|
| Communications | | | |
| 33 | Do vehicles on runways use the designated aerodrome control frequency? | | |
| 34 | If No to Q33, is there a separate frequency used instead for the communications between vehicles and the TWR (and how are pilots made aware of these vehicle operations)? | | |
| 35 | Has a lack of English language proficiency been identified as a contributing factor in your runway safety occurrences? Discuss associated English outreach/educational activities and associated measurement of effectiveness. | | |
| 36 | Are communications always in English? | | |
| 37 | If No to Q36, how does the ANSP ensure that communication on the aerodrome is conducted to improve situational awareness for pilots, drivers and ATC? | | |
| 38 | If No to Q36, does your aerodrome have a phased plan for use of aviation English for all communication associated with the runway operation? <i>Please refer to GAPPRI ANSP10 for additional guidance.</i> | | |
| 39 | Is the radio telephony for controllers, pilots and drivers assessed annually with the aim of continuous RT improvement? | | |
| 40 | Does the assessment include elements such as frequency loading, use of ICAO compliant phraseology, speech rate, teamwork crosschecking communication and readbacks/hearbacks? | | |

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ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|----------------------------------|---|-----------|---------------------------------------|
| Organisational Programmes | | | |
| 41 | Is your organisation using advanced technologies to enhance runway safety and improve situational awareness for front-line operators (e.g. SMR, A-SMGCS, Lead on Light/Follow-the-Green, Runway Status Lights, Stop Bars, Approach Runway Verification (ARV), Electronic Flight Strips, Integrated Tower Working Positions, Conformance with ATC Clearances, Conflicting (incorrect) ATC clearances)? <i>Please refer to GAPPRI ANSP32 for additional guidance.</i> | | |
| 42 | Are there any plans to implement new technologies or enhance the effectiveness of existing technology? | | |
| 43 | Are you using technologies that enable location identification of traffic on the manoeuvring area (e.g., via GPS with transponder, Mode S squitter, etc.) to improve situational awareness of controllers? | | |
| 44 | Do you have an arrangement with the meteorology provider to notify changes to the weather? | | |
| 45 | Does your aerodrome have established procedures for the provision of aerodrome information (including runway surface condition) to pilots and drivers (e.g. NOTAM, ATIS, directed transmission, maps, new digital technology or other means)? | | |
| 46 | If yes to Q45, is your organisation involved in the development/review of these procedures? | | |
| 47 | In coordination with the aerodrome operator, have you implemented procedures to ensure that significant and up-to-date aerodrome information which may affect operations on the runway is provided to manoeuvring area drivers and pilots (e.g., by notices to airmen (NOTAMS), ATIS, R/T, maps, new digital technology or other means)? | | |

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| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|----------------------------------|--|-----------|---------------------------------------|
| Organisational Programmes | | | |
| 48 | Does your organisation include any of the following fundamentals in controller training? | | |
| | a) Human Factors (HF) | | |
| | b) Threat and Error Management (TEM) | | |
| | c) Team Resource Management (TRM) | | |
| | d) Fatigue Risk Management System (FRMS) | | |
| 49 | Does your organisation have an Occupational Health and Safety policy with associated procedures? | | |
| 50 | Do ATC supervisor and controller roles and responsibilities require monitoring of the following? | | |
| | a) Controller environment | | |
| | b) Workload | | |
| | c) Distractions | | |
| | d) Fatigue | | |
| 51 | Do you feel pressured to reduce safety standards to meet increasing operational demand? | | |
| 52 | If you answered Yes to Q51, is this a frequent occurrence? | | |
| 53 | Does your organisation consider the risks associated with any changes prior to implementation? | | |
| 54 | If Yes to Q53, do these considerations include how your change to procedures may impact the pilot, airside driver and/or controller from a safety perspective? | | |
| 55 | Do you maintain an active risk register relating to runway operations? | | |

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| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|----------------------------------|--|-----------|---------------------------------------|
| Organisational Programmes | | | |
| 56 | Are knowledge sharing sessions between pilots and ATC organised annually? E.g. Jump seat flights or pilot visits to the ATC facility | | |
| 57 | Are annual knowledge sharing sessions between ground operators (e.g. airside drivers & RFF) and ATC organised? | | |
| Runway Incursion | | | |
| 58 | Do you annually assess runway safety procedures for operation on the manoeuvring area to identify improvements and address potential sources of confusion or misunderstanding? <i>The assessment may be performed internally and/or at LRST meetings. Please refer to GAPPRI ANSP8 for additional guidance.</i> | | |
| 59 | Do you use any procedures that may lead to pilot/driver confusion or expectation and a subsequent runway safety occurrence? For example, do you regularly use runways for taxi? | | |
| 60 | Do you have control of/use of/procedures for ground lighting that may influence runway safety? (E.g. Stop bars, crossing lit stop bars, lit versus unlit runways and taxiways) | | |
| 61 | Do you use Capacity Enhancing Procedures at your aerodrome? These may include the following: | | |
| | a) Conditional clearances (<i>please refer to GAPPRI ANSP16 for additional guidance</i>) | | |
| | b) Intersection departures | | |
| | c) Multiple line-ups | | |
| | d) Other procedures | | |

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| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|-------------------------|--|-----------|---------------------------------------|
| Runway Incursion | | | |
| 62 | If Yes to Q61, do you regularly review the use of Capacity Enhancing Procedures (when used individually or in combination) on their potential hazards and appropriate mitigation strategies? | | |
| 63 | If there are Low Visibility Operation procedures at your aerodrome, was your ANSP involved in their development and/or in the regular review of the procedures? | | |
| 64 | Are controllers specifically trained in the use of Low Visibility Operations and is it required to retain currency? | | |
| 65 | If you answered yes to Q64, how are controllers trained? | | |
| | a) Desk top exercise | | |
| | b) Discussion | | |
| | c) Simulator | | |
| 66 | If LVOs are seasonal, is training/refresher training completed close to the season? | | |
| 67 | Do you use stop bars? | | |
| 68 | If you answered Yes to Q67, do the stop bar procedures comply with ICAO (+/or National Regulator) guidance? | | |
| 69 | Given the documented benefits of stop bars, do you have a plan to install them in the future? | | |
| 70 | Are there contingency plans in place to address stop bar equipment failure? | | |
| 71 | How are these contingency plans shared? Are these shared with drivers/pilots? | | |
| 72 | Do you use any procedures or technology to increase overall situational awareness when vehicles are on the runway, such as 'vehicle operation normal' calls or other local methods? | | |

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ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|-------------------------|---|-----------|---------------------------------------|
| Runway Incursion | | | |
| 73 | Do you have clear and robust procedures, such as a standardised strip management system, in place to show that a runway is occupied, obstructed or unavailable? <i>Please refer to GAPPRI ANSP27 for additional guidance.</i> | | |
| 74 | Do you generally give lengthy and/or complicated taxi instructions to pilots or airside drivers? E.g. more than 3 TWYs at a time. Or whenever possible, do you provide shorter, less complex instructions or even progressive taxi? <i>Please refer to GAPPRI ANSP12 for additional guidance.</i> | | |
| 75 | Do you provide en-route clearances prior to taxi in order to avoid flight crew distractions during taxi? | | |
| 76 | Do you ensure that the aircraft is stopped before giving any revision to the en-route clearance? <i>Please refer to GAPPRI ANSP13 for additional guidance.</i> | | |
| 77 | Do you consider pilots' briefing/FMS programming requirements prior to offering a change of runway for departure or landing (i.e. considering flight deck workload)? <i>Please refer to GAPPRI ANSP19 for additional guidance.</i> | | |
| 78 | Do you use standard taxi routes to mitigate the risk of taxi errors? <i>Please refer to GAPPRI ANSP18 for additional guidance.</i> | | |
| 79 | If you answered Yes to Q78, are the standard taxi routes clearly promulgated and available to pilots? | | |
| 80 | Where are these standard routes published to enable access for operators? | | |
| 81 | Do your ATC procedures include a requirement to issue a specific clearance to enter, cross, line-up, backtrack or take-off on any runway? (Including runways not in use?) | | |

CANSO/ACI Runway Safety Checklist

ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|-------------------------|---|-----------|---------------------------------------|
| Runway Incursion | | | |
| 82 | Do you always use the phrase: "HOLD POSITION" when passing a revised clearance to an aircraft that is at a holding position or on the runway? | | |
| 83 | Do you avoid using oblique or angled taxiways for line-up that limit the ability of the flight crew to see the runway threshold or the final approach area? | | |
| 84 | If you answered No to Q83, how frequently are these TWYs used? | | |
| 85 | If you answered No to Q83, are there separate markings for line-up rather than the markings used to vacate the runway? | | |
| 86 | To help prevent pilots from taking the wrong intersection, do you issue line-up, take-off, or crossing clearances only when the aircraft is at or near the runway holding position and there are no intersections ahead on the taxiway? | | |
| 87 | If the take-off clearance is not issued together with the line-up clearance, do you always use the phrase "line-up and wait"? | | |
| 88 | When an aircraft is instructed to line up and wait due to a reason other than usual runway traffic spacing, do you always provide the reasons for waiting, e.g., provide information about traffic to cross the runway? | | |
| 89 | Do you avoid the use of "immediate departure" as far as practicable? <i>Please refer to GAPPRI ANSP25 for additional guidance.</i> | | |
| 90 | Do you require the passing of after-departure instructions separately from runway line-up instructions? | | |

CANSO/ACI Runway Safety Checklist

ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|-------------------------|--|-----------|---------------------------------------|
| Runway Incursion | | | |
| 91 | <p>Do you have a procedure to avoid giving line-up clearance if the aircraft will need to wait on the runway for more than 90 seconds? <i>Please refer to GAPPRI ANSP21 for rationale and additional guidance.</i></p> <p><i>How is ATC situational awareness maintained when such a 90+ second clearance is issued?</i></p> | | |
| 92 | If the aircraft holds on the runway for more than 90 seconds, do you have a procedure to give the pilot updated instructions? | | |
| 93 | Does ATC procedure allow the use of line-up clearances while a runway inspection is in progress? | | |
| 94 | If Yes to Q93, how do you mitigate the associated runway incursion risk? | | |
| 95 | In which direction are runway inspections performed (opposite to landing direction)? Any specific reasons for the deviation? | | |
| 96 | Do you inform flight crews about ongoing runway inspections when aircraft are on final approach or approaching the runway holding position? | | |
| 97 | Does your airport operator coordinate with you regarding standard routes and scheduled timings for routine runway inspections? | | |
| 98 | Do you discuss or review traffic criteria with your airport operator when planning runway inspections? <i>Please refer to GAPPRI ANSP09 for additional guidance.</i> | | |
| 99 | Do you plan for extra time for periodic in-depth runway inspections (airport capacity reduction may need to be agreed for a detailed inspection)? | | |
| 100 | Do you regularly review runway inspection and maintenance procedures together with the aerodrome operator? | | |

CANSO/ACI Runway Safety Checklist

ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|---|---|-----------|---------------------------------------|
| Runway Incursion | | | |
| 101 | Does the aerodrome operator have plans or considerations for implementing procedures and technologies, such as unmanned aircraft systems, for future runway inspections? | | |
| 102 | Do you have procedures to monitor aircraft vacating runways, in particular where the exit taxiway may lead directly to another runway (crossing)? | | |
| 103 | Do you have procedures in place to avoid giving a landing clearance too early or too late (e.g. not before the final approach fix/final approach point (FAF/FAP), not below 1,000 ft above ground level)? | | |
| Unstable Approach/Runway Excursion | | | |
| 104 | Do you have an arrangement with the airport to communicate and update runway condition reports according to GRF? | | |
| 105 | Are ATCs provided with procedures on how to identify, notify and/or react to an unstable approach? | | |
| 106 | Are ATCs in all units regularly trained or briefed on the following? | | |
| | a) Importance of a stabilised approach and compliance with final approach procedures | | |
| | b) ATC contribution to a stabilised approach (e.g. avoid changing runway, speed control) | | |
| 107 | Do you have procedures and processes to review aircraft performance guidance material in consultation with airlines? | | |
| 108 | Do you have a mechanism to gain feedback from airlines regarding the ongoing suitability of approach procedures? | | |

CANSO/ACI Runway Safety Checklist

ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|---|--|-----------|---------------------------------------|
| Unstable Approach/Runway Excursion | | | |
| 109 | Do you have procedures for the provision of timely, accurate and clear instructions to flight crew including position, track and distance (e.g. track miles to touch down) information based on aircraft type and performance to convey traffic management intentions? | | |
| 110 | Do ATC flow control procedures manage ATC capacity? Does this flow control consider the prevailing meteorological conditions? | | |
| 111 | Do you have procedures for late notice runway changes that reduce track miles? | | |
| 112 | If Yes to Q111, do these procedures consider aircraft type, performance capability, vectoring and resequencing to re-establish aircraft profile, wind effect on profile and approach type? | | |
| 113 | Do your procedures require speed control to only be applied outside the final approach fix? | | |
| 114 | Do your procedures require effective communication and coordination between Tower and Approach? E.g. Do you have a hotline/direct communication between tower and approach? | | |
| 115 | Do your procedures require a query of pilot speed deviation or other instructions? | | |
| 116 | Do you have the capability and procedure for controllers to monitor airspeed through Mode S downlink? | | |
| 117 | When an aircraft is vectored to intercept an approach, is it ensured that the aircraft captures the glideslope from below? | | |
| 118 | Do your procedures specify the criteria for offering precision/non-precision approaches over a visual approach? | | |

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ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|---|---|-----------|---------------------------------------|
| Unstable Approach/Runway Excursion | | | |
| 119 | Do you encourage controllers to visually scan aircraft on approach and alert flight crew to significant flight path/profile deviations? | | |
| 120 | Do your procedures detail requirements for protection of critical and sensitive areas of approach aids and the runway including notifications of obstructions to flight crew? | | |
| 121 | Have you implemented processes to ensure your NOTAM system publishes approach aid status and runway surface conditions (e.g. SNOWTAM) in line with GRF? | | |
| 122 | Do your procedures require monitoring of approach aid status? | | |
| 123 | How are controllers notified of any approach aid status changes? E.g. audio and/or visual alerts? | | |
| 124 | Do your procedures for the selection of the 'in use' runway consider the actual runway surface conditions? | | |
| 125 | Do you ensure that pilots are informed of the Take-off Run Available (TORA) or the Landing Distance Available (LDA) if these differ from the published data? | | |
| 126 | Prior to offering track shortening or change of approach, do you consider the following? | | |
| | a) Aircraft flight deck requirements | | |
| | b) Descent profile | | |
| | c) Aircraft configuration management | | |
| | d) Stabilised approach requirements | | |
| | e) Environmental conditions (e.g. wind) | | |
| 127 | In the event of an aircraft go-around, do you minimise transmissions to allow pilots to concentrate on the critical phase of the manoeuvre? | | |

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ANSP Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|---|--|-----------|---------------------------------------|
| Unstable Approach/Runway Excursion | | | |
| 128 | Do your procedures provide criteria to aid decision making in go-around situations? | | |
| 129 | If you answer Yes to Q128, is this included as a practice in desktop or simulator exercises? | | |
| 130 | Does your ATC facility track and analyse unstable approach events? E.g. occurrence report, surveillance data. | | |
| 131 | Has your ATC facility, together with air operators and other service providers, assessed the risk of unstable approach events for your airport? | | |
| 132 | Does your ATC facility work with air operators and other service providers to implement measures to systematically reduce the rate of unstable approaches? | | |

CANSO/ACI Runway Safety Checklist

Airport Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|---------------------------------|---|-----------|---------------------------------------|
| Local Runway Safety Team | | | |
| 1 | Is there an established Local Runway Safety Team (LRST) at your location? | | |
| 2 | If you answered 'No' to Question 1, is runway safety formally addressed as part of the agenda in another airport forum? | | |
| 3 | Do the following front-line stakeholders participate in your LRST or similar forum? | | |
| | a) Pilots (from airline operators, airline association, general aviation, flight schools, military operation etc. depending on traffic types at the airport) | | |
| | b) Air traffic controllers | | |
| | c) Manoeuvring area vehicle drivers | | |
| | d) Aircraft Rescue and Fire Fighting (ARFF) personnel | | |
| 4 | Does your LRST or similar forum meet at a minimum of twice a year? Individual aerodromes may require a different meeting frequency, such as quarterly, every other month, or on an ad hoc basis for special upcoming events or construction projects. | | |
| 5 | Do you serve as the chair of your LRST (or equivalent forum)? | | |
| 6 | If not, which stakeholder serves as the chair of the LRST (or equivalent forum)? | | |
| 7 | Are all organisations operating on the manoeuvring area (e.g. aerodrome operator, ANSP/ATC, aircraft operators, others when applicable) represented and actively participating in the LRST (or equivalent forum)? | | |
| 8 | Does the LRST (or equivalent forum) provide advice to airport management and operations staff on the following? | | |
| | a) Prevailing local conditions on the runway, taxiways and adjacent areas | | |

CANSO/ACI Runway Safety Checklist

Airport Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|---------------------------------|--|-----------|---------------------------------------|
| Local Runway Safety Team | | | |
| 8 | b) Safety Issues and other matters of concern or importance | | |
| | c) Mitigating measures and solutions for identified issues | | |
| 9 | Are there Key Performance Indicators (KPIs) tracked by the LRST (or equivalent forum) to evaluate the level of Runway Safety Performance? | | |
| | a) If there are KPIs, are these leading indicators, lagging indicators, or both? | | |
| | b) If there are tracked KPIs, are trends regularly analysed? | | |
| 10 | Does the LRST (or equivalent forum) consider both Runway Incursions and Runway Excursions? | | |
| 11 | Does your LRST (or another equivalent airport forum) have any of the following topics on the agenda: | | |
| | a) Local runway safety occurrences (e.g. runway incursions, runway excursions, high speed rejected take off, taking off from taxiways, etc.) | | |
| | b) Runway surface condition and reporting (including compliance with the Global Reporting Format [GRF]) | | |
| | c) Planned and ongoing airport work | | |
| | d) Aerodrome signage, markings, and lighting | | |
| | e) Low visibility operations | | |
| | f) Foreign Object Debris (FOD) management | | |
| | g) Unmanned Aerial Vehicle (UAV) incidents | | |
| | h) Wildlife hazard management | | |
| | i) Communication procedures and practices | | |

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|---------------------------------|---|-----------|---------------------------------------|
| Local Runway Safety Team | | | |
| 11 | j) Local procedures, practices, and publications related to runway operations or runway safety | | |
| | k) Lessons learnt - local | | |
| | l) Lessons learnt - external (if yes, what are the sources referred to?) | | |
| | m) Staff training | | |
| | n) Obstacle Limitation Surface | | |
| | o) Availability of service providers and maintenance of equipment / systems required for safe runway operations (e.g. MET systems) | | |
| 12 | Is the LRST (or equivalent forum) supported by a national runway safety programme? | | |
| 13 | Are runway safety hotspots identified at your airport and clearly depicted on aerodrome charts? | | |
| 14 | Does your airport have an incident reporting system that encourages all airport users (including airport staff) operating on the manoeuvring area to report hazards/issues/occurrences relating to runway safety? | | |
| 15 | Are runway safety occurrences (not only incidents) investigated? | | |
| 16 | Are incident investigation reports made available to the LRST for distribution to all stakeholders? | | |
| 17 | Are other safety-related occurrences that do not qualify as incidents (near-miss) reported and investigated? | | |
| 18 | Are LRST safety recommendations from accident and incident investigations disseminated to all stakeholders? | | |

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|---------------------------------|--|-----------|---------------------------------------|
| Local Runway Safety Team | | | |
| 19 | Are the investigation reports shared with relevant airport stakeholders (e.g. ANSP, ground handlers) and non-members of the LRST? | | |
| 20 | Does your airport keep a database of all runway incidents at the airport? | | |
| 21 | Are incident data used to identify trends and provide insights into emerging risks? | | |
| 22 | Is the information from runway safety incidents applied for the development and implementation of programmes to prevent recurrence or enhance runway safety at your airport? | | |
| 23 | Does your airport organise regular safety awareness campaigns in collaboration with the LRST? If so, who is the target audience of these campaigns? | | |
| Aerodrome Works/Changes | | | |
| 24 | Is the design of new aerodrome infrastructure or changes to existing infrastructure discussed with the LRST to account for runway safety hazards (e.g., avoid crossing runways or using complex taxiways)? | | |
| 25 | Is information from risk assessments during each stage of work disseminated to impacted stakeholders (e.g., pilots, ATC, contractors)? This includes: <ul style="list-style-type: none"> • Coordination measures • Work Schedules • Risk mitigation measures | | |
| 26 | Who is responsible for ensuring runway aerodrome construction work requirements are met? | | |
| | a) LRST as a group | | |
| | b) ANSP | | |
| | c) Airport operator | | |
| | d) Designated project team | | |

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Airport Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|--------------------------------|---|-----------|---------------------------------------|
| Aerodrome Works/Changes | | | |
| 27 | Is there a written procedure in place to guide the airport for airside or runway works? If yes, does it include the following? | | |
| | a) Updated information about work areas. Is consequential operational impact adequately presented through change management to all stakeholders? | | |
| | b) Coordination between the ANSP and aerodrome operator is established prior to notification to the regulator | | |
| | c) Obscure/remove existing signs and markings as appropriate | | |
| | d) Temporary signs and markings are clearly visible, adequate, and unambiguous under all appropriate conditions, and are tested by drivers, pilots, or air traffic controllers | | |
| | e) Aerodrome construction contractors and other personnel working at the airside are appropriately (and regularly) briefed on runway safety and runway incursion prevention prior to commencing work and are supervised whilst operating on the aerodrome | | |
| Airside Driving | | | |
| 28 | Does your airport have a driver's training and licensing programme for personnel operating on the manoeuvring areas and/or on the runway? | | |
| 29 | Are airside vehicle operators trained, checked, and assessed on compliant radio phraseology? Such training to include readback/hear back procedures and the proper use of radio equipment, including the below list? | | |
| | a) Radio checks and readability scale | | |
| | b) Radio communication failures (transmitting blind) | | |

CANSO/ACI Runway Safety Checklist

Airport Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|------------------------|---|-----------|---------------------------------------|
| Airside Driving | | | |
| 29 | c) When a driver becomes lost or uncertain of the vehicle's position on the manoeuvring area | | |
| | d) Position reporting | | |
| | e) Runway access and runway crossing requests | | |
| 30 | Is the ANSP involved in the airside driving training on radiotelephony? | | |
| 31 | Does your airport promote the adoption of 'sterile cab' procedures in vehicles to minimise sources of distraction and to improve communication focus when operating on the manoeuvring area? | | |
| 32 | Does your airport ensure that all vehicles operating on the manoeuvring area are in radio contact with the appropriate Air Traffic Control service (i.e., ground and/or tower), either directly or via an escort? | | |
| 33 | If you answered 'No' to Q32, is a dedicated Ground-to-Ground (G/G) frequency available and separate from frequencies used by aircraft? | | |
| 34 | Does your airport conduct regular audits of airside driving permits, particularly for those with access to runways? | | |
| 35 | Does the audit cover the pre-requisite requirements for airside drivers that can access runways? | | |
| 36 | Is there an expiry or validity period in place for airside drivers? | | |
| 37 | If you answered 'No' to Q36, do airside drivers who pass the driving test but do not operate a vehicle for several years remain legally approved to drive on the airfield and/or runway? | | |
| 38 | Are runway incursion risks and mitigations included within initial and refresher/recurrent training of operational staff (e.g. RFF drivers, airport maintenance/electricians, etc). | | |

CANSO/ACI Runway Safety Checklist

Airport Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|------------------------|---|-----------|---------------------------------------|
| Airside Driving | | | |
| 39 | In collaboration with ANSPs, is significant and up-to-date aerodrome information which may affect operations on the runway provided to manoeuvring area drivers and pilots (e.g., by NOTAMS, automatic terminal information service (ATIS), radiotelephony (R/T), maps, new digital technology or other means). | | |
| 40 | Do airside vehicle drivers have a real-time view of the aerodrome to promote awareness and remain alert to the potential for a runway collision between an aircraft and an airside vehicle? | | |
| 41 | Is tracking of vehicle movements available by adopting technologies that enable ATC and other parties to locate and identify traffic on the manoeuvring area? | | |
| Communications | | | |
| 42 | Are communications conducted in English? | | |
| 43 | Are there formal written procedures in place for communication between the local ANSP and personnel operating on the manoeuvring area? | | |
| 44 | If you answered 'Yes' to Q43, is there a standard operating procedure (SOP) solely developed and maintained by the ANSP, or is it jointly developed and managed between the airport and the ANSP? | | |
| 45 | Who is responsible for the SOP governing personnel operating on the manoeuvring area? | | |
| 46 | Is the LRST involved in the development and the review of the SOP? | | |

CANSO/ACI Runway Safety Checklist

Airport Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|-----------------------------|--|-----------|---------------------------------------|
| Aerodrome Facilities | | | |
| 47 | Does your airport have the capability to provide real-time meteorological information (e.g., ATIS, AWIS, windsock, windshear alerting system, weather radar, runway visibility and range monitoring systems)? | | |
| 48 | Do runway holding points at your airport have the following features? | | |
| | a) Clearly marked holding points | | |
| | b) Properly signed holding points | | |
| | c) Guard lights installed at holding points | | |
| | d) Centreline markings provided at holding points (where applicable) | | |
| | e) Ground detection loops installed at holding points (where applicable) | | |
| | f) Advanced Surface Movement Guidance and Control System (A-SMGCS) or ASDE-X (where applicable) | | |
| | g) Microwave Barrier Detection System (where applicable) | | |
| | h) Stop bars operational at holding points (where applicable) | | |
| 49 | If you answered 'Yes' regarding stop bars, are they operated during all hours of aerodrome operation? | | |
| 50 | Is your airport applying the ICAO standard naming convention for the manoeuvring area to help eliminate ground navigation errors and communication confusion? | | |
| 51 | Does your airport collaborate with the ANSP to avoid infringing the line of sight from the air traffic control tower, for example by assessing any visibility restrictions that could impact the ability to monitor the manoeuvring area, especially critical areas such as runway entry points? | | |

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Airport Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|--|--|-----------|---------------------------------------|
| Aerodrome Facilities | | | |
| 52 | If you answered 'Yes' to Q51, who is responsible for ensuring the line-of-sight requirements from the air traffic control tower are maintained? | | |
| Procedures, Processes and Practices | | | |
| 53 | Does your airport have any local procedures or aerodrome configurations that could lead to pilot or driver confusion, incorrect expectations, and a subsequent runway safety occurrence? For example, using non-standard markings on the manoeuvring area, or treating an unused runway as a taxiway without appropriately closing, marking, or reclassifying it. | | |
| 54 | Do you have control over, or procedures governing ground lighting systems that could influence runway safety? For example, apron floodlights that may cause glare or impair pilot visibility during final approach. | | |
| 55 | Are Low Visibility Procedures (LVP) established at your aerodrome? | | |
| 56 | If you answered 'Yes' to Q55, are all airside staff trained in the Low Visibility Procedures (LVP)? If so, are staff trained through classroom-based instruction, practical training, and periodic refresher training? | | |
| 57 | Does your airport have formal written procedures for the provision of aerodrome information, including runway surface condition reports, to pilots during all hours of aerodrome operation (e.g., through NOTAMs, ATIS, or direct transmissions)? | | |
| 58 | At your airport, has consideration been given to the potential safety benefits of conducting runway inspections in the opposite direction to runway movements? | | |

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Airport Focus

| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|--|--|-----------|---------------------------------------|
| Procedures, Processes and Practices | | | |
| 59 | Does your airport have a programme in place to maintain the runway surface friction characteristics through removal of contaminants? | | |
| 60 | How frequent are runway surface friction tests scheduled at your airport? | | |
| 61 | Under what circumstances would an ad hoc runway surface friction test be warranted? | | |
| 62 | Does your airport have maintenance programmes relating to runway operations and are they periodically assessed for effectiveness? | | |
| 63 | Are the runway maintenance inspections (lighting/signage/markings/pavements) performed solely by maintenance staff, or are they also conducted periodically by LRST representatives? | | |
| 64 | How frequent are these inspections performed? | | |
| | a) Daily | | |
| | b) Weekly | | |
| | c) Every Other Month | | |
| | d) Every 6 Months | | |
| 65 | In collaboration with the ANSP, are the following procedures periodically reviewed for runway inspections and other runway works? | | |
| | a) Carrying out routine runway inspections in the opposite direction of runway movements with vehicle lights on regardless of the time of day. | | |
| | b) Ensuring that uni-directional lighting is inspected efficiently on the basis of risk and operational needs assessment. | | |

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| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|--|--|-----------|---------------------------------------|
| Procedures, Processes and Practices | | | |
| | c) Implementing procedures to increase overall situational awareness when vehicles occupy a runway (to be decided locally, e.g., technology, 'vehicle operation normal' calls or other means). | | |
| 65 | d) Implement standard routes and timings for routine runway inspections. | | |
| | e) Temporarily suspending operations to allow a comprehensive runway inspection to be performed without interruption on the basis of risk and operational needs assessment. | | |
| 66 | Are external emergency services personnel escorted and accommodated to drive on the airfield during emergencies? | | |
| 67 | If you answered 'No' in Q66, how are external emergency services personnel escorted and authorised to drive on the airfield during emergencies? | | |
| 68 | Does your airport have a Snow and Ice Control Plan? (where applicable) | | |
| 69 | Does your airport have procedures for the partial and full closure of taxiways and runways, in accordance with ICAO and/or national regulatory criteria, including the use of displaced thresholds? | | |
| Organisational Programmes | | | |
| 70 | When conducting safety or risk assessments related to runway safety, are ATC staff invited to participate? Are other relevant stakeholders, such as local pilots, also invited to contribute? | | |
| 71 | Do you maintain an active risk register for your airport specifically related to runway operations? | | |
| 72 | Do you have a mechanism in place for interfacing with other organisations/ stakeholders to collaborate on hazard identification and control? | | |

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| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|----------------------------------|---|-----------|---------------------------------------|
| Organisational Programmes | | | |
| 73 | Within the scope of sharing safety data while protecting critical information, do you have an arrangement to share safety information with all airport stakeholders/organisations interfaced? | | |
| 74 | Does your aerodrome have established procedures for the provision of aerodrome information (including runway surface condition) to pilots and drivers (e.g. NOTAM, AIP, maps, new digital technology or other means)? | | |
| 75 | In coordination with the local ATC/ANSP, have you implemented procedures to ensure that significant and up-to-date aerodrome information which may affect operations on the runway is provided to manoeuvring area drivers and pilots (e.g., by notices to airmen (NOTAMS), AIP, R/T, maps, new digital technology or other means)? | | |
| 76 | Does your organisation include any of the following fundamentals in general airside staff training? | | |
| | a) Human Factors (HF) | | |
| | b) Threat and Error Management (TEM) | | |
| | c) Team Resource Management (TRM) | | |
| | d) Fatigue Risk Management | | |
| 77 | Does your organisation have an Occupational Health and Safety policy with associated procedures? | | |
| 78 | Do you feel pressured to reduce safety standards to meet increasing operational demand? | | |
| 79 | If you answered Yes to Q78, is this a frequent occurrence? | | |
| 80 | Does your organisation consider the risks associated with any changes prior to implementation? | | |

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| No. | Questions | Yes/No/NA | How can this airport improve on this? |
|----------------------------------|--|-----------|---------------------------------------|
| Organisational Programmes | | | |
| 81 | If Yes to Q80, do these considerations include how your change to procedures may impact the pilot, airside driver and/or controller from a safety perspective? | | |
| 82 | Are annual knowledge sharing sessions between ground operators (e.g. airside drivers & RFF) and ATC organized? | | |



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