

# Runway Safety Checklist

**For:**

- Air Traffic Controllers (or Air Navigation Service Provider)
- Airport Operations Staff (or Airport)
- Pilots (or Airline/Flying Organisation)

# Aim

Runway Safety considers three main areas:

- Runway incursions
- Runway excursions
- Runway confusion

There are many organisations who are directly and indirectly involved in the maintenance of runway safety across the globe. In addition to specific actions on individuals and organisations, runway safety relies on all parties to work together:

- at specific geographical locations (eg. airports); and
- within/across organisations
  - at the tactical level (eg. Pilot, Air Traffic Controller, Airport Operations); and
  - at the strategic level (eg. Airlines, ANSP, Airport).

The aim of the Runway Safety Checklist is to ask the user a range of questions which will:

- Allow them to assess their level of runway safety,
- Ask how they can improve runway safety, and
- Increase their knowledge on factors which are important to runway safety.

The checklist is written for consideration at the tactical level, but can be interpreted to allow runway safety to be considered from a strategic or organisational perspective.

The checklist is divided into sections for Air Traffic Control, Airport and Aircraft Operator, to enable the user to answer specific questions relating to how their particular functions contribute to runway safety. However, users can also review the other sections to gain a better understanding of other functions and/or to informally consider whether any opportunities for improvement exist for the other areas.

The checklist was intentionally designed to cover a range of aviation operations (eg. International airline operations at major airports, through to General Aviation operations at non-towered airports). This means that not all questions will be applicable to all users. Although 'N/A' is an option for all questions, users may wish to use the opportunity to research the particular topic in more detail.

The checklist cannot be considered a comprehensive source of all questions/topics relating to the maintenance of runway safety, but provides guidance and a 'starting point' for future development and research for the user.

## Reference Information

There is a wide range of reference and guidance material available on runway safety. Although many sources were used, the primary references for the development of the checklist were:

- The European Action Plan for the Prevention of Runway Incursions (EAPRI),
- The European Action Plan for the Prevention of Runway Excursions (EAPRE),
- The CANSO Runway Safety Maturity Checklist,
- Personal experience, discussions and runway safety forum participation.

## Resources and Reference Material

### ICAO Runway Safety Toolkit

([http://cfapp.icao.int/tools/RSP\\_ikit/story.html](http://cfapp.icao.int/tools/RSP_ikit/story.html).)

The ICAO Runway Safety Toolkit is an excellent portal to the range of information and training products available on runway safety. The toolkit enables the user to access specific runway safety material which has been developed by the following organisations:

- Airports Council International (ACI)
- Civil Air Navigation Services Organisation (CANSO)
- Eurocontrol
- European Aviation Safety Agency (EASA)
- Federal Aviation Administration (FAA)
- Flight Safety Foundation (FSF)
- International Air Transport Association (IATA)
- International Business Aviation Council (IBAC)
- International Civil Aviation Organisation (ICAO)
- International Coordinating Council of Aerospace Industries Associations (ICCAIA)
- International Council of Aircraft Owner and Pilots Association (IAOPA)
- International Federation of Airline Pilots' Associations (IFALPA)
- International Federation of Air Traffic Controllers Associations (IFATCA)

### Airservices Australia

Airservices Australia has a range of information on its Runway Safety webpage at <http://www.airservicesaustralia.com/flight-briefing/pilot-and-airside-safety/runway-safety/> including:

- A Pilots Guide to Runway Safety (booklet)
- An Airside Drivers Guide to Runway Safety (booklet)
- Tips to Avoid a Runway Incursion (flyer)
- Establishing a Local Runway Safety Team (flyer)

For more information on runway safety, or for feedback and suggestions on this checklist please contact [safety.promotions@airservicesaustralia.com](mailto:safety.promotions@airservicesaustralia.com)

# Air Traffic Control

## Local Runway Safety Team

Questions	Y/N/ NA	How can you improve this?
Is there a Local Runway Safety Team (LRST) at your location? If not, is runway safety formally included in the agenda of another airport forum?		
Does the LRST (or equivalent forum) consider Runway Incursions, Runway Excursions and Runway Confusion?		
Does the LRST (or equivalent forum) have the following topics on the agenda <sup>1</sup> : <ul style="list-style-type: none"> <li>• Local runway safety occurrences</li> <li>• Airport works (Planned/Ongoing)</li> <li>• Aerodrome signage, markings and lights</li> <li>• Low visibility operations</li> <li>• FOD management</li> <li>• Wildlife management</li> <li>• Communications</li> <li>• Local procedures, practices and publications that relate to runway operations or runway safety</li> <li>• Lessons learnt (local and external)</li> </ul>		
Do you actively participate in the LRST (or equivalent forum)?		
Do other aerodrome operators (including airside drivers, airlines, airport, ARFF etc) actively participate in the LRST (or equivalent forum)?		
Does the LRST (or equivalent forum) get supported by a national runway safety program?		

## Reporting and Learning Environment

Questions	Y/N/ NA	How can you enhance this?
Does the aerodrome have a reporting process and culture that encourages reporting of hazards/issues/occurrences relating to runway safety?		
Does your organisation have a reporting process and culture that encourages reporting of hazards/issues/occurrences relating to runway safety?		
Do you report runway safety hazards/issues/occurrences relating to your own organisation/the aerodrome/aircraft operators?		

<sup>1</sup> More guidance on establishing a LRST and agenda topics is available at <http://www.airservicesaustralia.com/wp-content/uploads/LRST-Guidance.pdf>.

## Air Traffic Control

Do runway safety occurrences get investigated to determine why they happened?		
Is the information from runway safety occurrences used in the development and implementation of programs to prevent recurrence or enhance runway safety at your location (or elsewhere)?		
Are runway safety occurrences, issues and procedures (local and national) briefed/discussed to all controllers?		
Is runway safety included as a topic in initial and recurrent training?		

## Aerodrome Works

Questions	Y/N/ NA	How can you improve this?
Does the aerodrome have consultation and awareness programs relating to planned and/or ongoing aerodrome works?		
Does this program include the maintenance of visibility between the Tower and the manoeuvring area?		
Do you actively participate in these programs?		

## Airside Training

Questions	Y/N/ NA	How can you improve this?
Does the aerodrome have airside driver and pilot familiarisation training?		
Do you assist with the content development, or delivery of this training?		
Do you (and your ATC colleagues) complete this training?		

## Communications

Questions	Y/N/ NA	How can you improve this?
Do you use standard communications procedures, phraseology and readbacks at your location?		
Are communications always in English?		
Do all vehicle movements on the aerodrome use a radio?		
Does English proficiency of ATC, pilots or aerodrome operators affect runway safety?		
Do your communications systems and procedures improve situational awareness for pilots, drivers and ATC?		

## Organisational Programs

Questions	Y/N/ NA	How can you improve this?
Does your organisation (and/or your local unit) consider the use of technology to enhance runway safety?		
Does your organisation include Human Factors (HF), Threat and Error Management (TEM) and Crew Resource Management (CRM) fundamentals in controller training?		
Do you comply with the concepts, lessons and procedures included in your organisational programs?		
Do ATC supervisor and controller roles and responsibilities require monitoring of controller environment, workload, distractions, internal or external pressures?		
Do you always consider safety as your highest priority, or do other factors such as operational efficiency sometimes seem to be prioritised higher? If so, is this generally a 'one-off' or 'regular' occurrence?		
Do you consider the risks associated with any changes thoroughly prior to implementation? Do these considerations include how your change to procedure may impact the pilot from a safety perspective?		

## Runway Incursion

Questions	Y/N/ NA	How can you improve this?
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?		
Do you have control of/use of/procedures for ground lighting that may influence runway safety? (Eg. Stop bars, lit versus unlit runways and taxiways)		
Do you use Capacity Enhancing Procedures at your aerodrome? (Eg. Conditional clearances, Intersection departures, Multiple line-ups etc) If so, have you considered any potential hazards associated with these procedures when used individually or in combination and developed appropriate mitigation strategies?		
Are there Low Visibility Procedures at your aerodrome? Are you involved in their development? Are all controllers trained in them?		
Do you use stop bars? Do the procedures comply with ICAO (+/or National Regulator) guidance? Are there contingency plans in place for stop bar equipment failure?		
Do you generally give lengthy and/or complicated taxi instructions to pilots or airside drivers, or whenever possible, provide shorter, less complex instructions or even progressive taxi?		
Do you give aircraft Airways Clearances prior to taxi?		
Do you use standard taxi routes? If so, are these routes clearly promulgated and available to pilots?		
Do you have a clear and robust procedure in place to show that a runway is occupied, obstructed or unavailable?		
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?)		
Have you considered the potential safety benefits of carrying out runway inspections in the opposite direction to runway movements at your aerodrome?		
Would you issue a line up clearance if the aircraft will be expected to wait on the runway for more than 90 seconds beyond the time it will normally be expected to depart?		
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?		

## Runway Excursion

Questions	Y/N/ NA	How can you improve this?
<p>Does your aerodrome have established procedures for the provision of aerodrome information (including surface information) to pilots? (Eg. NOTAM, ATIS or directed transmission)</p> <p>Do you actively participate in this program?</p> <p>Is the procedure suitable for all hours of aerodrome operation? (Eg. Can you accurately provide pilots information on runway surface conditions if the Aerodrome Safety Officer or Inspection Team are unavailable?)</p>		
<p>Do you have procedures to ensure that the ATIS is updated in a timely manner and the action is recorded and/or directly broadcast? (Eg. including pilot and/or system derived reports such as SPECIs, wind shear reports ,AIREP/PIREP, runway surface conditions, approach aid status)</p>		
<p>Is the importance of a stabilised approach and compliance with final approach procedures included in training and briefing for air traffic control staff?</p>		
<p>Do you have procedures for the provision of timely, accurate and clear instructions to Flight Crew including position, track and distance information based on aircraft type and performance to convey traffic management intentions?</p>		
<p>Do ATC flow control procedures manage ATC capacity? If so, does this consider the prevailing meteorological conditions?</p>		
<p>Do you have procedures for late notice runway changes that reduce track miles? If so, do these consider aircraft type, performance capability, vectoring and resequencing to re-establish aircraft profile, wind effect on profile and approach type?</p>		
<p>Do your procedures require:</p> <ul style="list-style-type: none"> <li>• Speed control to only be applied outside the final approach fix</li> <li>• Query of pilot speed deviation or other instruction</li> <li>• Effective communication and coordination between Tower and Approach?</li> </ul>		
<p>When vectoring to intercept an approach, do you ensure the aircraft captures the glideslope from below?</p>		
<p>Do you visually scan aircraft on approach and alert Flight Crew of significant flight path/profile deviation, and respond to pilot requests?</p>		
<p>Do your procedures detail requirements for protection of critical and sensitive areas of approach aids and runway strip including notifications of obstructions to Flight Crew?</p>		
<p>Do your procedures require monitoring of approach aid status?</p>		

## Air Traffic Control

Do you ensure that pilots are informed of the Takeoff Run Available (TORA) or the Landing Distance Available (LDA) if these differ from the published data?		
Do you provide distance to run information to pilots on approach?		
Do you consider aircraft cockpit requirements, descent profile, aircraft configuration management, stabilised approach requirements and environmental conditions (eg. wind) prior to offering track shortening or change of approach?		
In the event of an aircraft go-around, do you minimise transmissions to allow pilots to concentrate on the critical phase of the manoeuvre?		
Do your procedures provide criteria to aid decision making in go-around situations?		
Do you consider pilots' briefing/FMS programming requirements prior to offering a change of runway for departure or landing?		

Airport

# Airport

## Local Runway Safety Team

Questions	Y/N/ NA	How can you improve this?
Is there a Local Runway Safety Team (LRST) at your airport? If not, is runway safety formally included in the agenda of another airport forum?		
Does the LRST (or equivalent forum) consider Runway Incursions, Runway Excursions and Runway Confusion?		
Does the LRST (or equivalent forum) have the following topics on the agenda <sup>2</sup> : <ul style="list-style-type: none"> <li>• Local runway safety occurrences</li> <li>• Airport works (Planned/Ongoing)</li> <li>• Aerodrome signage, markings and lights</li> <li>• Low visibility operations</li> <li>• FOD management</li> <li>• Wildlife management</li> <li>• Communications</li> <li>• Local procedures, practices and publications that relate to runway operations or runway safety</li> <li>• Lessons learnt (local and external)</li> </ul>		
Do you actively participate in the LRST (or equivalent forum)?		
Do other aerodrome users (including airside drivers, airlines, ATC, flying organisations, ARFF etc) actively participate in the LRST (or equivalent forum)?		
Does the LRST (or equivalent forum) get supported by a national runway safety program?		

## Reporting and Learning Environment

Questions	Y/N/ NA	How can you improve this?
Does your airport have an internal reporting process and culture that encourages reporting of hazards/issues/occurrences relating to runway safety?		
Does your airport have a reporting process and culture that encourages other airport users to report issues/occurrences relating to runway safety?		
Do you report runway safety hazards/issues/occurrences regarding your airport/aircraft operators/ATC?		
Do runway safety occurrences get investigated to determine why they happened?		

<sup>2</sup> More guidance on establishing a LRST and agenda topics is available at <http://www.airservicesaustralia.com/wp-content/uploads/LRST-Guidance.pdf>.

## Airport

Is the information from runway safety occurrences used in the development and implementation of programs to prevent recurrence or enhance runway safety at your airport (or elsewhere)?		
Are runway safety occurrences, issues and procedures (local and national) briefed/discussed with airport staff?		
Is runway safety included as a topic in initial and recurrent training?		

## Consultation

Questions	Y/N/ NA	How can you improve this?
Does your airport hold specific joint training and familiarisation in the prevention of runway incursions with Pilots, Air Traffic Controllers and Manoeuvring Area Vehicle Drivers? Does this include visits to the manoeuvring area to increase awareness of signage and layout?		
At your location, are there consultation, awareness and training programs for changes to aerodrome, ATC or operator procedures to ensure runway safety is considered?		
Do you actively participate in these programs?		
Do you adequately disseminate information about temporary work and ensure that temporary signs and markings are clearly visible, adequate and unambiguous in all relevant conditions?		
Do you and the Regulator proactively work together to develop enhancements to runway safety at your airport?		

## Aerodrome Works

Questions	Y/N/ NA	How can you improve this?
At your airport, is new aerodrome infrastructure or changes to existing infrastructure designed to prevent runway safety occurrences?		
When conducting aerodrome works or infrastructure projects, do you avoid infringing lines of sight from the air traffic control tower?		
Does your airport have consultation and awareness programs relating to planned and/or ongoing aerodrome works?		
Do you actively participate in these programs?		

## Airside Driving

Questions	Y/N/ NA	How can you improve this?
Does your airport have airside driver and pilot familiarisation training?		
Do you assist with the content development or delivery of this training?		
Do you have a formal driver training and assessment program?		
Does your airport have formal communications training and assessment for drivers and other personnel who operate on or near the runway?		
Do you (and other airport staff) complete this training?		
Does your airport ensure all vehicles on the manoeuvring area are in radio contact with the appropriate air traffic control service (or CTAF traffic for non-towered aerodromes) either directly or through an escort?		
At your airport, are all Manoeuvring Area Vehicle Drivers briefed at the start of a shift and kept updated throughout the shift?		
Does your airside driver training include procedures on what to do if uncertain of your position on the manoeuvring area?		
Are airside vehicle operators trained, checked and assessed on compliant radio phraseology including readback/hearback procedures?		
Does your airport have transponder equipage of vehicles for airside operations?		
At your airport do you track vehicle movements on the manoeuvring area?		

## Communications

Questions	Y/N/ NA	How can you improve this?
Do you use standard communications procedures, phraseology and readbacks at your airport?		
Are communications always in English?		
Do all vehicle movements on the aerodrome use a radio?		
Does English proficiency of ATC, Pilots or aerodrome operators affect runway safety?		
Do your communications systems and procedures improve situational awareness for pilots, drivers and ATC?		

## Aerodrome Facilities

Questions	Y/N/ NA	How can you improve this?
Does your airport consider the use of technology to enhance runway safety?		
Does your airport have the capability to provide real-time meteorological information? (Eg. ATIS/AWIS /windsock /windshear alerting system/weather radar/runway visibility and range monitoring systems)		
Are your runways constructed and refurbished to ICAO (+/or National Regulator) specifications so that effective friction levels and drainage are achieved?		
Does your airport ensure that appropriate navigation aids (eg. ILS, AGL, PAPIs) and surface markings are maintained in accordance with ICAO (+/or National Regulator) Standards and Recommended Practices, to promote the accurate landing/touchdown point?		
Are runway holding points clearly marked, signed and if required, lit? Do you use signage at the runway holding points used for intersection takeoffs to indicate the Takeoff Run Available (TORA)?		
Are wind sensors and wind direction indicators (wind socks) sited to give the best practicable indication of conditions along the runway and touchdown zones?		
Has your airport considered the ICAO standard naming convention for the manoeuvring area to eliminate ground navigation error and communication confusion?		
Is your runway and taxiway layout designed to optimise runway safety performance by: <ul style="list-style-type: none"> <li>• being consistent with ICAO (+/or National Regulator) requirements</li> <li>• including RESA and/or other arrestor systems</li> <li>• having appropriate position, length, width, gradient and surface characteristics, friction coatings, grooving, surface texturing and drainage optimised for prevailing conditions, including alternatively aligned runway</li> <li>• providing adequate runway (edge &amp; centreline) and taxiway lighting</li> </ul>		
Does your airport have access to an ICAO (+/or National Regulator) compliant aviation rescue and fire fighting service?		
Are there any local phenomena or reports which make airport signs, markings or lights difficult to see or understand by airport users?		
Is taxiway and holding point lighting adequate, in accordance with ICAO (+/or National Regulator) standards?		

## Procedures, Processes and Practices

Questions	Y/N/ NA	How can you improve this?
Do you use any local procedures, or aerodrome configuration that may lead to pilot/driver confusion or expectation and a subsequent runway safety occurrence? An example would be local procedures to use non-standard markings on the manoeuvring area, or to treat a 'dis-used' runway as a taxiway, without appropriately closing, marking or re-classification.		
Do you have control of/use of/procedures for ground lighting that may influence runway safety?		
Are there Low Visibility Procedures at your aerodrome? Are you involved in their development? Are all airside staff trained in them?		
Does your airport have established procedures for the provision of aerodrome information (including surface information) to pilots (eg. NOTAM, ATIS or directed transmission)? Do you actively participate in this program? Is the procedure suitable for all hours of aerodrome operation? (Eg. Can you accurately provide pilots information on runway surface conditions if the Aerodrome Safety Officer or ATC are unavailable)?		
At your airport do you have a policy and robust procedure for Runway Inspections?		
At your airport have you considered any potential safety benefits of carrying out runway inspections in the opposite direction to runway movements?		
Do changes to manoeuvring area practices and procedures, including planned works take account of runway safety and include consultation with the local runway safety team? Is an adequate risk assessment conducted (with aerodrome users) for procedural and/or infrastructural changes on the manoeuvring area?		
Does your airport have a robust program in place to maintain the runway surface friction characteristics by removal of contaminants?		
Does your airport have robust procedures in place for calculating temporary reduced declared distances? (Eg. due to work in progress on the runway) If reduced declared distances are in operation, do you have appropriate temporary markings, lighting and signs to accurately portray the reduced distances? Is this information well communicated, and published appropriately?		
Does your airport have robust procedures in place for communicating safety information regarding aerodrome/surface conditions?		

## Airport

Have you implemented maintenance programs relating to runway operations? (Eg. markings, lighting and signage) Do you ensure that signs and markings are clearly visible, adequate and unambiguous in all relevant conditions?		
Are all of your airport's infrastructure, practices and procedures relating to runway safety in compliance with ICAO (+/or National Regulator) provisions?		
Do your airport emergency planning arrangements include Airlines, ATC, Aerodrome and emergency services? Does the planning include consideration of runway safety? (Eg. Are external emergency services personnel provided training/guidance material regarding safe operations around your runways?)		
Does your airport have (or need) a Snow and Ice Control Plan?		
Does your airport have procedures for partial and full closure of taxiway and runways in accordance with ICAO (+/or National Regulator) defined criteria including the use of displaced thresholds?		

## Organisational Programs

Questions	Y/N/ NA	How can you improve this?
Does your airport implement systems to ensure the fitness for duty, fatigue management, Occupational Health and Safety (OHS) and the existence of a positive safety culture for airport staff to work in?		
Does your airport have an SMS?		
Does your airport include Human Factors (HF), Threat and Error Management (TEM) and Crew Resource Management (CRM) fundamentals in training?		
Do you (and your colleagues) comply with the concepts, lessons and procedures included in your organisational programs?		
Does your airport ensure a continued focus on runway safety in internal audit activities?		
Do you always consider safety as your highest priority, or do other factors such as operational efficiency sometimes seem to be prioritised higher? If so, is this generally a 'one-off' or 'regular' occurrence?		
Do you consider the risks associated with any changes thoroughly prior to implementation? Do these considerations include how your change to procedure may impact the pilot from a safety perspective?		
Do you consider your procedures and practices to be more 'compliance-focussed' or based on a holistic view of working with other users to improve runway safety?		

# Aircraft Operator

## Local Runway Safety Team

Questions	Y/N/ NA	How can you improve this?
Is there a Local Runway Safety Team (LRST) at your location? If not, is runway safety formally included in the agenda of another airport forum?		
Does the LRST (or equivalent forum) consider Runway Incursions, Runway Excursions and Runway Confusion?		
Does the LRST (or equivalent forum) have the following topics on the agenda <sup>3</sup> : <ul style="list-style-type: none"> <li>• Local runway safety occurrences</li> <li>• Airport works (Planned/Ongoing)</li> <li>• Aerodrome signage, markings and lights</li> <li>• Low visibility operations</li> <li>• FOD management</li> <li>• Wildlife management</li> <li>• Communications</li> <li>• Local procedures, practices and publications that relate to runway operations or runway safety</li> <li>• Lessons learnt (local and external))</li> </ul>		
Do you actively participate in the LRST (or equivalent forum)?		
Do other aerodrome users (including airside drivers, ATC, other flying organisations, ARFF etc) actively participate in the LRST (or equivalent forum)?		
Does the LRST (or equivalent forum) get supported by a national runway safety program?		

## Reporting and Learning Environment

Questions	Y/N/ NA	How can you improve this?
Do the aerodromes you operate at have a reporting process and culture that encourages reporting of hazards/issues/occurrences relating to runway safety?		
Does your organisation have a reporting process and culture that encourages reporting of hazards/issues/occurrences relating to runway safety?		

<sup>3</sup> More guidance on establishing a LRST and agenda topics is available at <http://www.airservicesaustralia.com/wp-content/uploads/LRST-Guidance.pdf>.

## Aircraft Operator

Do you report runway safety hazards/issues/occurrences relating to your organisation/the aerodrome/ATC?		
Do runway safety occurrences get investigated to determine why they happened?		
Is the information from runway safety occurrences used in the development and implementation of programs to prevent recurrence or enhance runway safety at your location (or elsewhere)?		
Are runway safety occurrences, issues and procedures (local and national) briefed/discussed to all pilots?		
Is runway safety (runway incursions, excursions and confusion) included as a topic in initial and recurrent training? Does this training use realistic scenarios?		
Are you kept up to date with current airport safety information?		

## Aerodrome Works

Questions	Y/N/ NA	How can you improve this?
Does the aerodrome have consultation and awareness programs relating to planned and/or ongoing aerodrome works?		
Do you actively participate in these programs?		

## Airside Training

Questions	Y/N/ NA	How can you improve this?
Does the aerodrome have airside driver and pilot familiarisation training?		
Do you assist with the content development or delivery of this training?		
Do you (and your colleagues) complete this training?		

## Communication

Questions	Y/N/ NA	How can you improve this?
Do you use standard communications procedures, phraseology and readbacks? Does your organisation conduct training and checking of your radio telephony procedures?		
Are communications always in English?		
Do all vehicle movements on the aerodrome use a radio?		
Does English proficiency of ATC, pilots or aerodrome operators affect runway safety?		
Do your communications systems and procedures improve situational awareness for pilots, drivers and ATC?		

## Provision of Aerodrome Information

Questions	Y/N/ NA	How can you improve this?
Do the aerodromes you visit have established procedures for the provision of aerodrome information (including surface information) to pilots? (Eg. NOTAM, ATIS or directed transmission) Are these procedures suitable for all hours of aerodrome operation? (Eg. Are you accurately provided information on runway surface conditions if the Aerodrome Safety Officer or ATC are unavailable?) Do you actively participate in this program? (Eg. Do you advise ATC of weather phenomena or runway surface conditions if they differ from that advised to you?)		

## Organisational Programs

Questions	Y/N/ NA	How can you improve this?
Does your organisation (and/or your local unit) consider the use of technology to enhance runway safety?		
Does your organisation (including locally) implement systems to ensure the fitness for duty, fatigue management, Occupational Health and Safety (OHS) and the existence of a positive safety culture for pilots to work in?		
Does your organisation have an SMS?		

## Aircraft Operator

Does your organisation include Human Factors (HF), Threat and Error Management (TEM) and Crew Resource Management (CRM) fundamentals in training?		
Do you comply with the concepts, lessons and procedures included in your organisational programs?		
Does your organisation enable improvement by providing evidence of reports, analysis, recommendations and implementation of change to procedures/practices/facilities to improve runway safety performance?		
Does your organisation monitor aircraft parameters related to potential runway excursions in their Flight Data Monitoring (FDM) program?		
Has your organisation equipped their aircraft fleet with data-link systems (eg. ACARS) to allow you to obtain the latest weather (D-ATIS) without one pilot leaving the active frequency?		
Do you (or your organisation) report to the ANSP if approach procedures or ATC practices at an airport prevent you from complying with the published approach procedures and stabilised approach criteria?		

## Procedures, Processes and Practices

### Runway Incursion

Questions	Y/N/ NA	How can you improve this?
Does ATC generally give lengthy and/or complicated taxi instructions to pilots or airside drivers, or whenever possible, provide shorter, less complex instructions or even progressive taxi?		
If you have any questions or confusion about an ATC instruction or clearance, will you question it prior to proceeding?		
If you are unsure if you are able to meet an ATC request, instruction or clearance with enough time to safely complete your cockpit tasks and not increase the likelihood of a safety occurrence, will you speak up?		
Do you use any procedures that may lead to confusion or expectation and a subsequent runway safety occurrence? For example do you regularly use runways for taxi?		
At the aerodromes you visit, are all procedures compliant with ICAO (+/or National Regulator) guidelines?		
At all aerodromes that you visit, do you require a specific clearance to enter, cross, line-up, backtrack, takeoff or operate on all runways (including runways that are not in use)?		

Aircraft Operator

Would you enter a runway for departure if not ready to take off?		
Would you advise Air Traffic Control without delay if additional time on the runway is required for operational reasons?		
Do you use aircraft lighting when entering/crossing/operating on a runway or cleared for takeoff?		
During taxi for departure or during approach, would you accept a runway change if time to re-program the FMS/re-brief is not sufficient?		
If you have any doubts about your exact position on the surface of an aerodrome would you stop and contact ATC immediately?		
Would you accept a rapid exit taxiway or oblique or angled taxiway for line-up that limits your ability to see the runway threshold or the final approach area?		
At any of the aerodromes that you visit, do noise mitigation or other environmental programs increase the chances of a runway incursion, excursion or confusion occurrence? (Examples include aerodrome design and alignment based on noise considerations, noise preferred or runway operational mode, time-based runway selection to share noise load, runway specific curfews, arrival/departure curfews etc which may require additional backtrack, runway crossings or other similar and otherwise avoidable risk.)		
Do you request/receive Airways Clearances prior to taxi?		
Do you plan your taxi?		
Do you use an aerodrome chart for reference when taxiing?		
Do you use a sterile cockpit on the ground and in the air?		
Do you keep heads-out when taxiing?		
Are there Low Visibility Procedures at your aerodrome? Are you involved in their development? Are all pilots trained in them?		
Do you know what the signage, markings and lights mean at all of the aerodromes you operate at?		

## Procedures, Processes and Practices

### Runway Excursion

Questions	Y/N/ NA	How can you improve this?
Does your organisation ensure the importance of a stabilised approach and compliance with final approach procedures is included in briefing for flight crews?		
If you needed to request a more favourable runway for takeoff or landing for safety reasons, would you advise ATC the safety reason why?		
Do you, shortly before takeoff and landing, verify that the actual weather conditions are similar or conservative compared to the weather data used for the takeoff performance calculations and the in-flight landing distance assessment?		
Does your organisation publish the aircraft's crosswind limitations with specific guidance on the runway condition and the gust component?		
Does your organisation publish specific guidance on takeoff and landing techniques with cross wind (and/or wet or contaminated runway conditions) and the correct use of the nose wheel steering? Do they provide appropriate training?		
Does your organisation ensure their SOP requires the flight crew to perform independent determination of takeoff data and crosscheck the results? Does this include Flight Crew cross-checking the 'load and trim sheet' and performance data input into the Flight Management Computer (FMC).		
Does your organisation publish the rejected takeoff decision making process? Do they provide appropriate training?		
Does your organisation publish and provide training on the company policy regarding in-flight assessment of landing performance? Does company landing distance data relate to unfactored or operational distances? In the case of unfactored distances does the company provide the safety margin to be used in normal and abnormal conditions?		
Does your organisation publish the company policy, procedure and guidance regarding the go-around decision? Does it state that a go-around should be initiated at any time the safe outcome of the landing is not assured? Do they provide appropriate training?		
Does your organisation provide training on go-arounds at different altitudes?		

Aircraft Operator

<p>When accepting the landing runway do you consider the following factors: weather conditions (in particular cross and tailwind), runway condition (dry, wet or contaminated), inoperable equipment and aircraft performance? Would you take a precision approach, except in conditions that may favour a non-precision approach?</p>		
<p>Does your organisation publish Company criteria for stabilised approaches in their Operation Manual? Are you provided guidance and training on this?</p>		
<p>Does your organisation publish an SOP describing the pilot non flying duties of closely monitoring the flight parameters during the approach and landing? Are any deviations from Company stabilised approach criteria announced to the pilot flying using standard call outs?</p>		
<p>Does your organisation publish guidelines on the use of autoland when low visibility procedures (LVP) are not in force? In this scenario, do you take into account the status of the protected area for the Localiser signal? Do you fully brief such practice manoeuvres, in particular, readiness to disconnect the autoland/automatic rollout function and land manually, or go-around?</p>		
<p>Does your organisation publish an SOP regarding a touchdown within the appropriate touchdown zone? Is appropriate training provided?</p>		
<p>Do you use full reverse on wet/contaminated runways irrespective of any noise related restriction on their use, unless this causes controllability issues?</p>		
<p>Does your organisation publish an SOP on the pilot non flying duties of closely monitoring the activation of the stopping devices on landing and call out any omission to the pilot flying? Is appropriate training provided?</p>		
<p>Does your organisation include specific recovery techniques from hard and bounced landings in their training program?</p>		
<p>Does your organisation accept landing long as a practice? Is this practice safety risk assessed, with a published policy and SOP supported by appropriate flight crew training?</p>		
<p>Does your organisation have an SOP indicating the stage of flight that the ATIS should be monitored and require a PIREP/AIREP to be broadcast if the meteorological conditions are different to it?</p>		
<p>Does your organisation have an SOP that requires pilot monitoring of track miles, height or speed on approach (including confirmation with ATC of new track, distance, height or speed information and ATC plans)? Does it include rejection of instructions that are outside the SOPs, including interception above glidepath?</p>		
<p>Does your organisation have an SOP to advise ATC of changes to aircraft type, performance and stable approach criteria?</p>		

Aircraft Operator

<p>Does your organisation have SOPs requiring you to:</p> <ul style="list-style-type: none"> <li>• Utilise precision approaches where available</li> <li>• Brief appropriately for non-precision/visual approach when precision approaches are not available</li> <li>• Apply airline SOP criteria for use of non-precision and visual approaches</li> <li>• Request appropriate published instrument approach procedure to a runway with visual vertical guidance (eg. PAPI, VASIS etc)?</li> </ul>		
<p>Does your organisation have SOPs to ensure cross cockpit communication minimises internal/external pressures and power gradient so that decision to continue can be instantly challenged without recourse?</p>		
<p>Does your organisation support a Just Culture where a go-around or rejected take-off is required? (Eg. Management support for PF decision to initiate a go-around)</p>		
<p>Does your organisation have SOPs detailing energy management on approach and landing phase:</p> <ul style="list-style-type: none"> <li>• for airspeed, thrust, drag, flight path, braking application etc</li> <li>• standard calls by PNF to alert PF including current automation mode</li> <li>• to ensure correct profile or initiate go-around.</li> </ul>		
<p>Does your organisation have SOPs requiring a cross check of information (eg. rad alt Vs distance) and appropriate response to on-board alerts and cross checks including approach aid status?</p>		
<p>Does your organisation have SOPs to assure appropriate use of automation?</p>		
<p>Does your organisation have Pilot procedures which require notification to ATC of runway surface conditions?</p>		
<p>Does your organisation have SOPs prescribing braking settings according to runway surface conditions?</p>		
<p>Does your organisation have SOPs for recovery from:</p> <ul style="list-style-type: none"> <li>• failure of avionics</li> <li>• failure of undercarriage or braking systems</li> <li>• failure of flight and propulsion systems</li> <li>• FMS indicated gross error check?</li> </ul>		
<p>Have you completed all of the SOP-related training listed in this survey? Do you feel appropriately trained in all areas?</p>		
<p>Do you comply with all of the organisation's SOPs listed in this survey? Do you think all of your company policies mentioned in this checklist are sound? If not, have you discussed these policies with your Management or Standards area?</p>		
<p>Do you ever prioritise operational efficiency over safety? For example, accept track shortening to save a few minutes when you know that you might have difficulties correctly preparing yourself, your crew or your aircraft for an approach?</p>		