

RUNWAY SAFETY PROGRAMME

IN CIVIL AVIATION OF THE REPUBLIC OF KAZAKHSTAN





Original release date: 14/05/2024

Status: Approved

Responsible for the document: Department of Aerodromes and Ground Handling

2025

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REVISION SHEET

Rev.: 2.0
Date:
12/03/2025

Осы құжат "Қазақстанның авиациялық әкімшілігі" АҚ-ның меншігі болып табылады. /
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№ ed./	Date	Description	Content
1.0	14.05.2024	Initial Approved by Order No. 08/519 dated 14.05.2024 "On the Implementation of the Runway Safety Program in Civil Aviation of the Republic of Kazakhstan"	
2.0	12.03.2025	Approval Sheet; Terms and Abbreviations; Regulatory Documents; 1.1 Preface; 2.3.3; 2.3.4; 2.3.5; 5. Operational Practice.	Additions regarding the need to include the terms of reference and information on the composition of local groups in the aerodrome manual. Corrections of legal techniques. Adding an operational practice section.

CONTENT

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TERMS, ABBREVIATIONS, AND DEFINITIONS

Runway Safety	a condition in which the risks associated with the operation of aircraft on runways are reduced and controlled to an acceptable level.
Runway excursion	includes all events associated with actual or potential situations in which an aircraft leaves the runway or aerodrome operating area or the landing surface of any other pre-designated landing area without becoming airborne.
Runway incursion	covers any incident at an aerodrome involving the improper presence of an aircraft, vehicle or person on a protected surface area intended for the landing and take-off of aircraft.
Civil Aviation Organization	a legal entity operating in the field of civil aviation.
Air navigation service provider	a legal entity providing air traffic management and (or) other air navigation services.
Authorized organization in the field of civil aviation	a joint-stock company with 100% state participation in the authorized capital, carrying out activities aimed at ensuring the sustainable development of the civil aviation industry of the Republic of Kazakhstan, flight safety and aviation security (JSC Aviation Administration of Kazakhstan).
Aerodrome (heliport) operator	Aerodrome (Heliport) Operator – an individual or legal entity of the Republic of Kazakhstan, as well as an entity from another state in accordance with international treaties ratified by the

	Republic of Kazakhstan, that operates an aerodrome (heliport) based on ownership rights or other legal grounds.
Aircraft operator	an individual or legal entity engaged in the operation of civil aircraft or offering its services in this field
HotSpot	an area on the airfield movement area where collisions or runway incursions have already occurred or where there is a potential risk of such occurrences and where increased attention of pilots/drivers is required.
RWY	runway
ICAO	International Civil Aviation Organization
AIRAC	aeronautical information regulation and control
ATIS	automatic terminal information service
ATS	air traffic management
AIP	aeronautical information publications
FOD	foreign object debris
TWY	taxiway
RFFS	rescue fire fighting service
NOTAM	notice to airman
SMS	safety management system
ESTOP	electrical lighting support for flights
ERTOS	operation of radio equipment and communications
ELoS	equivalent level of flight safety.
NRSNG	National runway safety group
ILS	Instrumental landing systems

LRST	local runway safety team
SMGCS	surface movement guidance and control

REGULATIONS AND REFERENCES

This program has been developed using the following regulatory documents:

Regulatory Document (RD)	Approval
On the Use of the Airspace of the Republic of Kazakhstan and Aviation Activities	Law of the Republic of Kazakhstan dated July 15, 2010, No. 339-IV.
Model Instructions on Flight Safety Management for Civil Aircraft Operators, Airports, Air Traffic Services, Aircraft Maintenance, and Civil Aviation Training Centers Engaged in Flight Operations	Order of the Minister of Transport and Communications of the Republic of Kazakhstan dated March 28, 2011, No. 173.
Rules for Aerodrome Support in Civil Aviation	Order of the Acting Minister for Investments and Development of the Republic of Kazakhstan dated October 7, 2015, No. 978.
Safety Management	ICAO Annex 19.
Procedures for Air Navigation Services – Aerodromes	ICAO DOC 9981.
Safety Management Manual	ICAO DOC 9859.
Manual on the Prevention of Runway Incursions	ICAO DOC 9870.
Runway Safety Programme – Global Runway Safety Action Plan	ICAO, first edition, 2017.
Global Action Plan for the Prevention of Runway Excursions	Eurocontrol, 2021.
Runway Safety Team Handbook	ICAO, 2015.
FAA Order 7050.1B, Runway Safety Program	Dated July 11, 2013.
FAA National Runway Safety Plan	2024-2026.

1. GENERAL PROVISIONS

1.1 PREFACE

Ensuring safe runway operations is of critical importance to aerodrome operators, aircraft operators and air traffic services (ATS). The prevention of runway incursions and runway excursions should be an important part of programs and activities aimed at improving runway safety.

The aerodrome operator and ATS cannot independently improve safety or effectively manage runway safety operations without coordination and cooperation with other stakeholders and civil aviation organisations.

Improving runway safety is a collaborative process to develop an action plan that identifies and addresses runway safety issues by effectively identifying hazards and reducing risk. The collection, monitoring and analysis of runway safety data greatly contributes to the understanding and effective management of runway risks.

ICAO's 193 member countries are currently working towards an agreed global safety goal of zero fatalities by 2030, coupled with strengthening their regulatory capacity, while implementing a range of programs and targets relevant to current key areas of global aviation safety planning, oversight and risk mitigation.

2030 was chosen as the time frame for achieving this goal, since it is during this period that traffic volumes are projected to double. This is also the target year specified in the United Nations (UN) 2030 Agenda for Sustainable Development. To implement the strategic goal, ICAO has developed a global aviation safety plan - GASP.

GASP provides guidelines for developing a coherent aviation safety strategy and implementing industry and government safety plans.

The International Civil Aviation Organization (ICAO), through the development of GASP, the Global Aviation Safety Roadmap (GASR) and the Global Runway Safety Action Plan (GRSAP), urges States to continue their efforts to manage and control the risks associated with operations on runways at an acceptable safety level.

1.2 PURPOSE OF THE PROGRAM

1.2.1 This Runway Safety Programme (hereinafter referred to as the Programme) has been developed in accordance with the Standard Instructions for Flight Safety Management for Civil Aircraft Operators, at airports, during air Traffic Services, during aircraft maintenance, aviation training centers of civil aviation, whose activities are related to the performance of aircraft flights during the provision of services. (Order of the Minister of Transport and Communications of the Republic of Kazakhstan dated March 28, 2011 No. 173) and the Program for Flight Safety in the field of Civil Aviation, (approved by Resolution of the Government of the Republic of Kazakhstan dated March 11, 2016 No. 136) for the implementation of strategic goals and relevant initiatives of the Flight Safety Plan in order to create a sustainable risk management system related to with the safety of runway operations in the Republic of Kazakhstan.

1.2.2 The objective of the Programme is to systematize the approach of the state and civil aviation organizations in managing risk factors for the safety of operations on the runway, implementing effective measures to control these risks at a level acceptable for flight safety.

1.2.3 This programme applies to civil aviation aerodromes, jointly used and based civil and state aviation aerodromes.

1.2.4 Runway safety generally covers the following range of issues and ICAO event categories:

- Runway incursion;
- Runway excursion;
- collision on the ground (when an aircraft is taxiing to the runway from the runway on the maneuvering area);
- abnormal landing;
- ground handling;
- loss of ground control (eg due to runway or taxiway contaminants);
- collision with an obstacle(s) (during takeoff and landing of an aircraft in the air);
- undershoot/overshoot (touching the ground outside the runway in the immediate vicinity during the landing stage);
- other risks associated with the operation of the aerodrome.

From the given list, the events characterized by high risks include runway excursions and unauthorized runway incursions, as specified in Section 1.2.4 of this Program.

Mitigating the risks associated with these events is a strategic objective of the Republic of Kazakhstan's Flight Safety Plan and constitutes the focus of this Program.

1.2.5 Effective management of runway safety risks requires a comprehensive analysis and development of flight safety measures through joint coordinated activities from:

- aerodrome operators;
- aircraft operators;
- air navigation service providers;
- authorized bodies/organizations in the field of civil aviation.

1.2.6 The authorized civil aviation organization ensures the development and periodic revision of this Program, taking into account amendments and additions to ICAO international standards and recommended practices, the legislation of the Republic of Kazakhstan on the use of its airspace and aviation activities, as well as global best practices.

1.2.7 Amendments or additions to this Program shall be made by order of the Director General or the person acting in their capacity.

2. ROLES AND RESPONSIBILITIES

2.1 AUTHORIZED ORGANIZATION IN THE FIELD OF CIVIL AVIATION

2.1.1 The authorized organization in the field of civil aviation, in accordance with the requirements of this Programme, performs the following functions:

- development, approval and periodic review, amendments to the Programme to keep it up to date;
- development, approval, periodic review, and amendments to the plan to ensure the safety of operations on runways of civil aviation of the Republic of Kazakhstan;
- approval of the composition of the members of the working group on runway safety in civil aviation of the Republic of Kazakhstan;
- development and approval of runway safety checklists for certification and inspection of aircraft operators, air navigation service providers, and airfield operators;

- conducting an analysis of the effectiveness of the Programme and plan to ensure the safety of runway operations of civil aviation of the Republic of Kazakhstan;
- maintaining a general database of risks and hazardous factors associated with the performance of runway operations at aerodromes of the Republic of Kazakhstan;
- systematizes and summarizes the results of the runway operations safety teams in order to implement best practices.

2.1.2 The implementation by civil aviation organizations of the provisions of this Programme is subject of control by the authorized organization in the field of civil aviation.

2.2 NATIONAL RUNWAY SAFETY GROUP OF CIVIL AVIATION OF THE REPUBLIC OF KAZAKHSTAN (NATIONAL RUNWAY SAFETY GROUP - NRSG)

2.2.1 To coordinate activities to improve the safety of runway operations and implement the provisions of this Program and to improve it, a working group on the safety of runway operations of civil aviation of the Republic of Kazakhstan (NRSG) is being created.

2.2.2 NRSG determines strategic directions for improving runway safety, makes proposals for the development of initiatives and activities of a plan to ensure runway safety for civil aviation of the Republic of Kazakhstan, monitors the effectiveness of the implementation of initiatives and activities, assists in the creation and improvement of the efficiency of local runway safety groups (LRST) at aerodromes of the Republic of Kazakhstan.

2.2.3 The NRSG is created by order of the authorized organization in the field of civil aviation and includes in the working group specialists in the field of flight operations, air navigation and aerodrome operations, who are employees of the authorized organization in the field of civil aviation, representatives of the civil and state aviation industry, civil aviation organizations, specialists in various fields as agreed.

2.2.4 The frequency of NRSG meetings is established and the schedule is published on the official website of the authorized organization in the field of civil aviation, with meetings held at least once a year.

2.2.5 The main objectives of the NRSG are:

- comprehensive study of problems and development of comprehensive protective measures related to the performance of operations on the runways of airfields of the Republic of Kazakhstan;
- making proposals for plan activities to ensure the safety of operations on runways of civil aviation of the Republic of Kazakhstan;
- performing advisory and coordinating functions to promote the creation and increase the effectiveness of LRST;
- providing expert opinion or expertise on runway safety issues;
- consideration of equivalent level of safety (ELoS) in the presence of deviations from the requirements of the Legislation of the Republic of Kazakhstan in the field of civil aviation that affect the safety of operations on the runway.

2.2.6 To perform its main tasks, the NRSG performs the following functions:

- determination of the profile of the main risks associated with the safety of operations on the runway;
- identifying hazards through data collection and analysis;
- implementation of key standards and recommended practices aimed at improving safety and meeting the risk profile by developing a plan to ensure the safety of runway operations for civil aviation of the Republic of Kazakhstan;
- monitoring the progress of the civil aviation industry in implementing the plan to ensure the safety of operations on runways of civil aviation of the Republic of Kazakhstan;
- conducting performance assessments of LRSTs and providing advice on improving their performance;
- studying and solving flight safety problems of a private and general nature for runways at airports in the Republic of Kazakhstan;
- making proposals for changes to the regulations of the Republic of Kazakhstan in the field of civil aviation in terms of requirements ensuring the safety of operations on the runway;
- comprehensive and comprehensive review of the EUPP submitted by civil aviation organizations.

2.3 LOCAL RUNWAY SAFETY TEAM (LRST)

Note. Instructional material on organizing LRST activities is given in Appendix B to this Program.

2.3.1 By order of the responsible manager of the aerodrome operator, local runway safety teams (LRSTs) must be created at all certified aerodromes.

2.3.2 The aerodrome operator is the responsible organization for coordinating LRST activities. The aerodrome operator has primary responsibility for the runway safety plan and ensures that the plan is an effective tool in the aerodrome safety management system accordingly.

2.3.3 The aerodrome operator should include in the aerodrome manual the terms of reference and information on the composition of the LRST.

2.3.4 As a minimum, the Runway Safety Team (RST) must perform the following tasks within its terms of reference:

- analyze safety data regarding the number, type and, if possible, severity of runway incursions;
- review the results of investigation reports to identify local hazards and problem areas at the aerodrome;
- Encourage staff working in related areas to better understand operational challenges and suggest areas for improvement;
- ensure the implementation of recommendations regarding the prevention of runway incursions;
- identify any local problem areas and propose necessary solutions;
- Conduct campaigns to raise awareness of runway safety issues with a focus on local tasks, such as the production and distribution of local hazard maps or other guidance material as deemed necessary;
- Regularly review runway and aerodrome operations to proactively identify any situation that may increase the risk of the safe use of the runway.

2.3.5 The LRST should include representatives of the following groups directly involved in runway operations at a particular airfield:

- airfield operators;
- air traffic service authorities;
- commercial air carriers;
- flight crews performing operations at the aerodrome;
- members of the general aviation community (as appropriate).

2.3.6 Representatives of the following organizations may be involved in the LRST on a permanent or ad hoc basis:

- representatives of an authorized organization;
- representatives of state aviation (if applicable, on the basis of joint basing at an airfield or other military functions);
- representatives of ground service providers (de-icing, ground handling, catering, etc.);
- representatives of state emergency services;
- experts in the relevant field (meteorologists, ornithologists, accident investigation authorities, etc.) (by invitation); and
- consideration may be given to periodically inviting members of other LRSTS to share their experience in solving similar problematic issues.

2.3.7 Primary role of the LRST should be to develop a plan of action to ensure runway safety. This action plan should, at a minimum, assist in assessing the hazards and safety risks of runway operations and recommend measures to eliminate hazards and reduce risks. Such measures can be developed based on local incident data or information obtained from external databases.

1.3.8 The LRST must inform the management and operational personnel of relevant operators and service providers of prevailing local conditions, hazardous areas on runways, taxiways and adjacent areas. The LRST must advise management as appropriate on potential runway safety issues and recommend hazard elimination and risk management strategies.

1.3.9 LRST activities are based on the principles of safety risk management, which includes hazard identification, safety risk assessment, safety risk mitigation and risk acceptance.

1.3.10 LRSTs should have processes in place to obtain risk assessment results from team members, as the safety management systems (SMS) of the organizations involved may differ and so will the safety risk assessment processes.

1.3.11 LRST examines potential threats and aviation incident investigation reports to identify problem areas at the aerodrome to develop protective measures.

1.3.12 LRST conducts campaigns to raise awareness of runway safety among service personnel involved in the organization. Outreach activities focus on local issues. An example of such activities is the compilation and distribution of maps of local hot spots (HotSpot), visual materials in the form of posters, newsletters, etc.

1.3.13 The LRST, with the participation of all team members, periodically inspects the movement area to identify hazards that may pose risks to the safety of runway operations.

1.3.14 LRST implements at the aerodrome a local plan of measures to ensure the safety of runway operations, developed by identifying hazardous factors and assessing the risk of a violation of the safety of operations and based on a plan to ensure the safety of runway operations in civil aviation of the Republic of Kazakhstan.

1.3.15 LRST provides on a semi-annual basis a report on the implementation of the local action plan to ensure runway safety to the authorized organization in the field of civil aviation.

1.3.16 The LRST approves a schedule of meetings and meetings depending on the aerodrome situation and potential threats, but at least twice a year.

3. PLAN TO ENSURE THE SAFETY OF OPERATIONS ON RUNWAYS OF CIVIL AVIATION OF THE REPUBLIC OF KAZAKHSTAN

3.1 The purpose of the plan to ensure the safety of runway operations of civil aviation of the Republic of Kazakhstan is to provide the civil aviation industry of the Republic of Kazakhstan with measures aimed at improving the safety of runway operations.

3.2 A plan to ensure the safety of runway operations for civil aviation of the Republic of Kazakhstan is being developed by the NRSG. Before approval, the plan to ensure the safety of runway operations of civil aviation of the Republic of Kazakhstan is sent for consideration to the involved civil aviation organizations.

3.3 The plan for ensuring the safety of runway operations of civil aviation of the Republic of Kazakhstan defines tasks and measures aimed at improving the safety of runway operations.

3.4 In addition to the measures, the plan for ensuring the safety of operations on runways of civil aviation of the Republic of Kazakhstan contains the following information:

- organizations, structural units responsible for the implementation of plan activities;
- timing of activities and established priorities;
- if necessary, instructional material describing the procedure for performing specific activities.

3.7 Civil aviation organizations carry out local plan measures to ensure the safety of operations on the runway, track implementation deadlines, and also provide reports on the implementation of measures to the authorized organization with the relevant evidentiary documentation attached.

3.8 Based on the plan to ensure the safety of runway operations of civil aviation of the Republic of Kazakhstan, civil aviation organizations are developing their own plans for their implementation, taking into account the applicability of the initiatives.

4. LOCAL PLAN TO ENSURE RUNWAY SAFETY

4.1 Airport operators, within a period of up to 3 months from the date of approval of the plan for ensuring the safety of runway operations of civil aviation of the Republic of Kazakhstan or amendments to it, submit for consideration an approved local plan for ensuring the safety of operations on the runway.

4.2 Local plans are developed on the basis of identifying hazardous factors and assessing the risk of violating the safety of operations and measures of the plan to ensure the safety of operations on the runways of civil aviation of the Republic of Kazakhstan. In this case, the measures must be applicable taking into account the physical characteristics of the aerodrome, equipment, flight intensity, etc.

4.3 Local plans are submitted for consideration to the authorized organization in the field of civil aviation.

4.4 In addition to activities, the local plan must contain the following information:

- Organization, official responsible for implementation.
- resources (human, financial) necessary to complete the task.

- source(s) of financing, for example: investments, own funds, borrowed funds, etc.
- deadlines for the activities:
- indicators for assessing the implementation and effectiveness of the event.

4.5 Reports on the implementation of local plans are submitted to the authorized organization in the field of civil aviation on a semi-annual basis.

5. OPERATIONAL PRACTICES

5.1 PREVENTING UNAUTHORIZED OCCUPATION OF THE RUNWAY

5.1.1 New infrastructure and modifications to the existing airfield infrastructure should be designed in such a way as to prevent unauthorized occupation of the runway.

5.1.2 Changes to the practices and procedures for the use of the maneuvering area, including planned and ongoing work, should take into account the safety of runway operations and may require consultation with the LRST. Procedural and/or infrastructural changes related to the maneuvering area should be accompanied by an assessment of their safety in accordance with the procedures for certification and issuance of the certificate of airworthiness of the airfield (heliport) approved by the Order of the acting The Minister for Investment and Development of the Republic of Kazakhstan dated February 24, 2015 No. 187 and the Rules for Ensuring Air Navigation in Civil Aviation, approved by the Order of the Minister for Investment and Development of the Republic of Kazakhstan dated June 30, 2017 No. 420.

5.1.3 The airfield operator must designate the taxiway so as to eliminate errors in orientation on the ground and confusion during communication.

5.1.4 The aerodrome operator must exclude the screening of the direct view from the aerodrome air traffic control center (ATS). It is necessary to assess the risks of operational safety violations associated with the limitations of visibility from the airfield control room, which make it difficult to monitor the maneuvering area, and take the necessary corrective actions.

5.1.5 Runway inspection procedures should take into account the prevention of unauthorized occupation of the runway.

5.1.6 Where appropriate, the aerodrome operator should issue aerodrome maps indicating dangerous areas from the viewpoint of unauthorized runway occupation. Such maps should be periodically reviewed, if necessary, distributed locally to drivers of vehicles in the maneuvering area and published in the Aeronautical Information Collection (AIP).

5.1.7 The risks of operational safety violations associated with identified hazardous areas should be assessed or reduced as soon as possible.

5.1.8 The prevention of unauthorized runway occupation should be taken into account when the aerodrome operator, together with the air navigation service provider, develops and implements ground traffic management and control systems (SMGCS).

5.1.9 LRST should review the runway safety plan when one or more of the following circumstances occur:

- the volume and intensity of aircraft and vehicle traffic is increasing significantly;
- operations are planned in conditions of lower visibility than is currently permitted;
- the airfield layout has changed, i.e. new runways, taxiways or aprons have been put into operation;
- there were cases such as the unintentional departure of aircraft, vehicles and the appearance of people on the runway and taxiway;
- messages received from pilots, ATS units or operational personnel about unclear signs, including lights, markers, markings and signs, etc., which can lead to confusion.

5.1.10 The LRST should periodically check the availability and operational use of visual aids to protect the runway.

5.1.11 Aerodrome operators should develop and implement an official "training and certification program for drivers of vehicles in the maneuvering area" and periodically review the instructions for drivers.

5.1.12 Aerodrome operators should ensure that, at the beginning of their work shift, all drivers of vehicles in the maneuvering area are informed of the operating conditions in the maneuvering area (runway in use, visibility conditions, etc.) and reminded to monitor the environment throughout the shift.

5.1.13 Aerodrome operators should ensure, in cooperation with the ATS service, the development and implementation of procedures for managing all vehicles in the maneuvering area.

5.1.14 Runway waiting areas should have clear markings, appropriate signs and, if necessary, lighting.

5.2 PREVENTING AIRCRAFT FROM VEERING OFF THE RUNWAY

5.2.1 In cases where the use of instrument landing systems (ILS) is envisaged, the aerodrome operator must ensure that critical and sensitive areas are protected and that the signals of these navigation aids are not distorted. For these purposes, the sizes of the critical/sensitive areas of the RMS should be determined and presented by the provider of air navigation services.

5.2.2 Aerodrome operators should ensure that ground-based aeronautical lights, signs and markings comply with the requirements for planned runway operations and, in particular:

- the aiming point and runway threshold must be clearly visible, contrast with the surface and be maintained in proper condition.;
- runway waiting areas should be clearly marked with a line width of at least 30 cm (type A2, B2), appropriate signs and, if necessary, illuminated to prevent departing aircraft from starting a takeoff run from the wrong runway exit point.;
- consideration should be given to installing signs in the waiting areas at the runway used for take-offs from the intersection indicating the remaining distance for the take-off;
- consideration should be given to using visual means to indicate the remaining length of the runway.

5.2.3 It is necessary to ensure timely removal of rubber deposits and other pollutants from the runway in order to maintain proper traction.

5.2.4 Providing the ATS unit with information about the wind along the approach path, including the direction, strength and gusts of wind, reduces the likelihood of aircraft rolling off the runway. Wind sensors and wind direction indicators should be placed in such a way that the most accurate information about conditions along the runway and in the landing zones can be obtained.

5.2.5 Aerodrome operators must ensure that the available distances specified by the AIS are correct for publication in the AIP.

5.2.6 Aerodrome operators should ensure that procedures are in place for calculating the exact values of temporarily reduced available distances (for example, due to runway work). In cases where reduced available distances are used, the aerodrome operator must

take measures to ensure that the temporary markings, lights and signs give an accurate picture of the reduced distances and the relevant information is submitted to the AIS in time for publication. Consideration should also be given to measures restricting access to intermediate runway exit points.

5.3 RUNWAY CONFUSION

5.3.1 Runway confusion occurs when aircraft crews take off or land on the wrong runway. This is a particular problem at airfields with parallel runway systems. Confusion with the runway can also occur when a taxiway, usually parallel, is mistaken for a runway - this is more often a problem at night.

5.3.2 The LRST should conduct an operational safety assessment, taking into account the factors listed below, in order to identify measures to reduce the risk of runway entanglement:

- night operations;
- operations in low visibility conditions;
- adverse weather conditions;
- insufficient accuracy of radiotelephone communication negotiations;
- improper lights, markings and signs;
- departures from the intersection;
- work in progress;
- using parallel taxiways;
- late issuance or change of flight control clearance;
- hurry;
- geometry and configuration of taxiways and runways;
- using runways as taxiing routes.

5.3.3 Situations in the maneuvering area that may lead to incorrect runway selection should be avoided.

Examples of measures taken for this purpose may include the following:

- correct identification of dangerous areas and notification of them;
- reducing the size/width of the entrance taxiways;
- closing of certain entrance taxiways;
- hanging signs that may lead to runway confusion during the work period;
- highlighting of ground - based illuminated taxiing routes at the airfield;
- the use of improved labeling.

Note. Almost all accidents during departures related to incorrect runway selection are the result of carelessness in visual recognition. Such accidents are most common when there is an artificial surface located next to the correct runway and having a similar or similar orientation.

5.3.4 The LRST should consider the aspects of human factors when choosing the preventive measures described in section 3.2.

5.4 TEMPORARY CLOSURE OR TERMINATION OF RUNWAY OPERATIONS

5.4.1 Planned and unplanned events at the airfield may require runway operations to be stopped for a short time (several hours) or for a longer period (several days).

5.4.2 In most cases, the reasons for the temporary suspension of runway operations will be unplanned. Examples may include:

- urgent removal from the runway of an aircraft or vehicle that has lost the ability to move;
- dangerous foreign object debris (FOD) on the runway;
- significant risk of collision with birds and wild animals on the runway;
- serious failure of the ground-based aeronautical lights or instrument landing System (ILS);
- the presence of ice/snow/water on the runway;
- an incident with an aircraft, for example, a tail impact on the runway, an aborted takeoff, a pneumatic rupture;
- emergency situation or local high alert status.

5.4.3 Procedures for temporarily stopping runway operations or planned runway closures should be described by the aerodrome operator in the relevant sections of the aerodrome manual. The procedures are introduced by agreement between the airfield operator and the ATS unit. Such procedures should specify the roles and responsibilities of the parties, methods of information dissemination and the procedure for resuming runway operations, and are included in the instructions for the interaction of airport services ensuring flight safety with the ATS authority. These procedures should be coordinated and regularly reviewed with relevant stakeholders and may describe specific local scenarios.

5.4.4 In case of temporary suspension of runway operations or runway closure, it is necessary to maintain close information exchange and interaction between the airfield operator, ATS units, AIS units (as appropriate).

5.4.5 Aerodrome operators should ensure that all stakeholders are fully informed of the procedures to be implemented in the event of a temporary shutdown of runway operations. During such a stop, the airfield operator must keep records of all work performed.

5.4.6 The aerodrome operator must supplement the verification of compliance with the written procedure by conducting regular training.

5.4.7 The list below contains a chronological sequence of actions that should be envisaged and taken when deciding on a temporary shutdown of operations.:

- notify the Air Traffic Services Authority (ATS) of the impending temporary shutdown of runway operations;
- with the permission of the ATS authority , authorized airfield personnel are given access to the runway to assess the situation .;
- authorized airfield personnel are conducting an initial assessment of the condition of the runway;
- the designated aerodrome representative decides whether to temporarily stop operations on the runway .;
- information about the decision is reported to the Department of Internal Affairs;
- the ATS unit distributes the information received to pilots, drivers of vehicles and other interested parties using the automatic transmission of information in the airfield area (ATIS) and radiotelephone communication.;
- a NOTAM is issued on the temporary suspension of runway operations (it may be necessary to issue a separate NOTAM if the airfield cannot be used for scheduled departures to an alternate airfield). If it is assumed that the duration of the temporary shutdown will be short, i.e. less than 60 minutes, it may not be necessary to issue a NOTAM.;
- if an accident has occurred, the aerodrome operator ensures notification to the relevant government authorities in accordance with the aviation accident and incident notification scheme (in some cases, it may be necessary to obtain permission from the investigating authority to clean up the wreckage);

- the aerodrome operator should liaise with the relevant department and the maintenance contractor, as well as with the aircraft operator, if necessary, to speed up the restoration work.;
- the aerodrome operator must notify the authorized civil aviation organization of the temporary suspension or termination of runway operations.

5.4.8 The aerodrome operator should ensure that in the event that runway operations are temporarily halted and the ATS unit retains authority to allow access to the runway, such access can only be granted subject to reliable control by the ATS unit, as in normal operations. In other cases, depending on the situation, uncontrolled access to the runway may be provided by the ATS authority in consultation with the airfield operator. In this case, a full runway inspection must be carried out before resuming normal operations.

5.4.9 The aerodrome operator may decide that in the event that a runway is closed due to a planned maintenance interruption, reliable control may be transferred to another authority, such as the aerodrome service, the ESTOP service, or uncontrolled access may be provided only to authorized users. The procedure for granting permission to access the runway must be agreed upon and documented in the instructions for interaction with the Department of Internal Affairs.

5.4.10 The following list contains a chronological sequence of conditions that must be met and/or applied when runway operations resume after they are temporarily stopped or closed:

- restoration work must be completed, for example, cleaning of FOD and remains of birds and wild animals, repair of the ground system of aeronautical lights, removal of an aircraft that has lost the ability to move;
- the runway was inspected with the permission of the Department of Internal Affairs;
- all vehicles and personnel must leave the runway and report to the appropriate authority .;
- runway readiness has been confirmed to the ATS unit and , where appropriate , full control has been transferred back to the ATS unit;
- airfield operators must cancel the NOTAM (if issued);
- the ATS unit should disseminate information about runway readiness using ATIS and radiotelephone communication (if necessary);
- it is allowed to resume normal operations.

5.4.11 The aerodrome operator, together with the ATS authority, should take measures to ensure that planned construction work on the runway is carried out, if possible, during periods of the day or year with low traffic intensity.

5.5 PRACTICAL RECOMMENDATIONS FOR THE IDENTIFICATION, ELIMINATION AND PUBLICATION OF "HOT SPOTS"

5.5.1 Aerodrome operators, air navigation service providers (AAS) and other interested parties should pay special attention to areas at the airfield where collisions and unauthorized runway exits have already occurred or there is a potential risk of such accidents. In addition, areas that, although fully compliant with the established requirements, are potentially difficult to navigate due to their complex geometry and require increased attention, such as runway intersections, can be dangerous.

5.5.2 Ideally, the LRST will take measures to eliminate dangerous areas. The solution to this problem assumes that airfield operators, together with LRST, should conduct an assessment to determine whether any dangerous area currently exists at the airfield. This assessment should take into account the possibility of dangerous areas arising from air traffic procedures (in particular, causal factors of unauthorized runway occupation such as conditional dispatcher permits and non-standard radio traffic) and other airfield operational procedures. When considering any hazardous area, due consideration should also be given to the human factor aspects.

5.5.3 If dangerous areas are identified, recommended hazard prevention strategies should be implemented and, if this cannot be done immediately, risk management measures should be taken to reduce the risk. Such strategies may include:

- construction of new taxiways;
- additional visual aids (signs, markings, lights);
- using alternative routes;
- exclusion of sectors not visible from the airfield control room;
- awareness - raising campaigns;
- publication of a dangerous area in AIP.

5.5.4 Some causal factors of a hazardous area can be eliminated quickly, but others may take longer to eliminate or may not be eliminated at all.

5.5.5 A new dangerous area may appear as a result of a change in the working area or operating procedure. In this regard, in order to prevent the unintentional creation of new dangerous areas, it is necessary to carry out an appropriate assessment before starting any work, such as a new marking of the pavement in the maneuvering area or the introduction of a new or modified operational procedure.

5.5.6 The above-mentioned assessment should be periodically repeated to confirm its reliability and take into account current operational practices and the aerodrome layout.

5.5.7 In cases where measures to reduce the risk or eliminate an identified dangerous area will be a lengthy process, or where it is believed that publishing a dangerous area will improve the situation for pilots, information about such a dangerous area should be brought to the attention of air traffic services personnel and pilots using the airfield.

5.5.8 However, if a dangerous area is likely to exist for more than one publishing cycle provided for by the Aeronautical Information Regulation and Control Mechanism (AIRAC), it must be marked on the aerodrome map in the AIP, as indicated in Appendix 4 "Aeronautical Maps", and include an appropriate warning in the special local traffic rules at the aerodrome (see the Rules air navigation services. Aeronautical Information Management (PANS-AIM, Doc 10066), Appendix 2, section AD 2.20).

5.6 MAIN CAUSES OF RUNWAY SAFETY VIOLATIONS

The list below provides an idea of the most common causes of runway safety violations.:

- Adverse weather conditions;
- runway surface condition (pollution);
- aerodrome layout;
- runway longitudinal slopes;
- Conditional dispatcher permissions;
- Complex procedures at the executive start;
- runway crossing procedures;
- simultaneous use of intersecting runways;
- delayed issuance and late changes of flight control permits;
- inappropriate, incorrect, or non-standard phraseology;
- simultaneous use of several languages during negotiations with the Department of Internal Affairs;

- radio frequency utilization;
- Insufficient proficiency in the English language;
- excessive workload of the pilot;
- excessive workload of the dispatcher;
- ongoing work;
- distraction (pilot, dispatcher, driver, etc.)

Appendix A - Guidance material for organizing Local Runway Safety Teams (LRST) at aerodromes

1. Introduction

ICAO Assembly Resolution A37-6 calls on States to improve runway safety. ICAO encourages and supports the creation and improvement of multidisciplinary runway safety teams at aerodromes.

Local LRST Runway Safety Teams have proven highly effective in reducing the risk of runway excursions and incursions, providing a collaborative solution that has positive input from civil aviation authorities, air navigation service providers, aircraft operators and airfield operators. Establishing an LRST to prevent and mitigate runway incidents is an important element of a runway safety program. Establishing an aerodrome LRST is key to developing and implementing an effective runway safety action plan and recommending strategies to eliminate hazards and reduce residual risks.

2. The purpose of creating an LRST at the airfield

The purpose of establishing an aerodrome LRST is to effectively inform the management and operational personnel of relevant operators and service providers about the prevailing local conditions on the runway, taxiway and surrounding areas, other issues of concern and the development of risk management measures at an acceptable level for safety.

The LRST must implement a runway safety action plan, advise management as appropriate on potential runway safety issues, and recommend strategies to eliminate hazards and reduce residual risk. These strategies can be developed based on data collected at the aerodrome in combination with information obtained from other sources.

LRST is not a regulatory authority and is not intended to replace any required component of an SMS, but is intended to enhance and support the safety of runway operations by integrating the safety systems of participating organizations (stakeholders).

Interfacing service providers must document the interface between their own SMS and the LRST activities. It is important to keep in mind that each participating organization is responsible for identifying and managing any hazards affecting that organization. The importance of the interface may vary for each organization. Each organization may reasonably apply different classifications of safety risks and assign different priorities to them (in terms of safety performance, resources, time, etc.).

The LRST meeting schedule depends on the situation and airfield conditions. For example, if major construction work is planned or the number of hazards and incidents increases, the LRST may need to hold more meetings.

LRST activities are based on the principles of a formal hazard identification and risk management process in accordance with ICAO Annex 19 - Safety Management and ICAO Doc 9859 - Safety Management Manual. The LRST should be able to obtain risk assessment information from team members as most will have their own SMS with different risk assessment processes.

LRSTs cover a wide range of issues related to runway safety, including, but not limited to, the categories listed in paragraph 1.2.3 of this Program.

3. Terms of Reference for the Runway Safety Team

“Regulations on the runway safety group” (hereinafter referred to as the Regulations) An LRST is a document that establishes the status, functions, rights, duties and responsibilities of the members of a working group, as well as a set of procedural rules governing the activities of the LRST.

LRST provisions should, at a minimum, cover the following issues:

- the purpose, scope and frequency of LRST meetings;
- processes for selecting working group members;
- individual roles and responsibilities of individual team members;
- processes and formal agreements governing the exchange of safety data, safety reports and safety information, and the protection of sources of information exchanged under LRST (protection from misuse and protection from disclosure);
- processes of consultation, decision-making and conflict resolution;
- documentation and reporting requirements;
- monitoring runway incidents by type, severity and frequency;
- regular inspections of the aerodrome to ensure its compliance with the requirements of ICAO standards and recommended practices;
- ensuring the implementation of local plan measures for runway safety;

- identification of hazards, local problems, specific places where risks exist (for example, HotSpot);
- engaging safety experts from industry and service providers;
- active development of solutions to flight safety problems at the airfield;
- development of local plans to ensure safety of runway operations;
- studying investigation reports of aviation events related to runway safety operations at other aerodromes and applying recommendations based on their results.
- disseminating information about decisions made by LSRT to stakeholders;
- Implementing a comprehensive safety awareness campaign to ensure that employees of all stakeholders are aware of runway safety issues. Such activities may include the preparation and distribution of local hot spot maps, posters aimed at illustrating work area traffic rules, development of instructional materials, and more.

4. Continuous improvement

All team members must monitor LRST performance for areas in need of improvement and/or failure to meet the conditions set out in the LRST Regulations.

The LRST Chairman plans and organizes internal reviews of LRST's performance. Internal reviews are conducted at least once every six months during scheduled meetings to discuss each item on the checklist contained in Appendix B to this document. The results of the inspection and the completed checklist are stored for at least two years.

External audits of LRST activities are carried out by third parties, for example, an authorized organization, airlines and other organizations (for example, within the framework of APEX, etc.)

The results of the audits are recorded and stored as part of the safety data library for the period described in the aerodrome operator's SPR.

5. Organizational structure of LRST

The organizational structure required for an LRST depends on the number of participating members, their ability to interact and cooperate, the size of the airport, traffic intensity, type of operations, complexity of the aerodrome, and any other local requirements. In any case, the main initiator and chairman is usually the aerodrome operator.

5.1 Chairmanship of LRST

The chairman acts as the coordinator and representative of the group. The appointment of the chairman may be done on a rotating basis among all members of the LRST.

The roles and responsibilities of the designated chair may also include various administrative and/or organizational aspects, such as:

a) Scheduling meetings

The chairman draws up a schedule of meetings and agrees on their location. He/she collects information from participants several weeks before the meeting and distributes the meeting program one week before the meeting date. Guidance for planning meetings is included in Annex D to this document.

b) Carrying out meetings

The Chair ensures that meetings are conducted in a collaborative manner and in accordance with the processes of the LRST Regulations. He/she continually strives to improve the group's performance by regularly participating in continuous improvement activities.

c) Maintenance of safety data

The Chair ensures that LRST activities are properly documented and stored.

d) Coordination with third parties

The Chair acts as a point of contact with external agencies and ensures that all LRST activities are properly communicated to the appropriate agencies/organizations.

5.2 Role of LRST members

a) Planning meetings

LRST members submit issues of concern for discussion at the meeting in advance and no later than the date requested by the Chair. Each participant speaking at the meeting should prepare information material and invite subject matter experts, if necessary, so that other participants have a better understanding of the issue they want to discuss. Meeting participants should tour the airfield immediately prior to the meeting to familiarize themselves with the current situation and identify potential security threats.

Note. — Consideration should be given to inspecting the airfield at different times of day and under different weather conditions to identify hazards specific to specific times of day and adverse weather conditions. The inspection is intended to identify safety issues only and should not cause disruption to the ongoing operations of the aerodrome.

b) Participation in meeting

LRST members will openly exchange information and strive to reach an agreed solution based on the results of the discussion. They must continually strive to improve the program by participating in continuous improvement activities.

c) Contribution to the safety database

Working group members must provide the LRST with safety data and analysis, reports and information from their own organization's SMS or other safety-related sources.

d) Coordination with participating organizations

LRST members must communicate LRST findings and decisions within their respective organizations and ensure that recommendations are properly implemented.

5.3 Role of the authorized organization

LRST activities are carried out within the framework of the aerodrome operator's existing SMS, which coordinates safety issues on the part of all users of the aerodrome. Although their participation is considered optional, ICAO encourages competent authority/organization professionals to attend LRST meetings to provide legal advice, exchange information, and understand current hazards and risks associated with local operations. In addition, it is easier for authorized bodies/organizations to establish interaction with other government agencies (for example, with local executive bodies) on behalf of LRST, when necessary.

6. LRST Technical Processes

6.1 Hazards and associated consequences

Once group members have been identified, a chairperson has been selected, and regulations and work schedules have been agreed upon, the work of identifying hazards begins. It is expected that each team member will be prepared to meet to briefly present the runway safety hazards that have been identified within their respective SMS or other safety related systems (primarily as a result of the development activities). safety reports, investigations and audits).

In addition to the above, the LRST should also conduct periodic visits to various airport locations (e.g., air traffic control towers, construction sites, taxiway intersections, etc.) and, as necessary, request information from third parties not officially represented by the LRST. These may include service providers, contractors, flight schools, industry

organizations, ground crews and others. By reaching a wide range of individuals and organizations, LRST will be able to gain a deeper understanding of the operational complexity associated with the airport environment, leading to better identification of hazards and operational risks.

When LRST members discuss the acceptability of a safety risk, it is important to remember that the degrees of likelihood and severity should be presented in terms of realistic operational scenarios, rather than in terms of very serious but extremely remote and unlikely consequences.

A useful technique is to identify the hazard (general hazard) and then list the specific hazards associated with it and their associated consequences. For example, a general hazard category might be “construction of airfield elements.” Specific hazards associated with airport construction activities may include “presence of construction equipment” and “taxiway closures.” This in turn may be assessed by LRST as “aircraft collision with construction equipment” and “aircraft entering a closed taxiway” as potential consequences of these specific hazards. By correctly identifying, documenting a hazard, and defining its associated consequences in operational terms, the LRST is able to assess the safety risk.

Sometimes hazardous conditions can combine to increase the likelihood and severity even further. For example, the hazards associated with the construction of an airfield element combined with the hazards of poor visibility and night work may result in a greater risk than simply constructing an airport (in which situation the probability of risk would likely be increased).

6.2 Risk assessment

The purpose of conducting a safety risk assessment is to provide LRSTs with a method to appropriately manage the risks of identified hazards, develop effective risk mitigation strategies, and prioritize their work process. Given that time and financial resources are limited, the following process allows the LRST to effectively determine which areas require its immediate attention in order to reduce the risk to runway safety operations to the lowest level practicable.

The process for assessing and managing runway safety risks should be consistent with the provisions set out in ICAO Doc 9859, Manual of Safety Management. Once hazards have been identified by the LRST, it is the aerodrome operator's job to determine

the severity of the safety risk in the context of the local system, taking into account the protection and mitigation controls currently in place. This information should then be used to classify the severity of the safety risk using predefined guidance in ICAO Doc 9859.

Based on the event that would have the worst consequences, the next step is to estimate the relative likelihood of that event occurring in a particular operating environment, after taking into account existing defenses and risk mitigation strategies. The team should consult relevant safety and hazard reporting databases, incident and accident investigation reports, flight data monitoring and analysis, operational audit data and other historical sources to determine the likelihood of the identified consequences occurring.

The final step in the assessment process is to ensure that the resulting level of safety risk is acceptable.

One of the advantages of using LRST to conduct a risk assessment is that all stakeholders were involved in the risk assessment process, ensuring that the worst-case outcome and associated probability were assessed.

6.3 Development of recommendations and action plan

Following a safety risk assessment, the LRST must develop specific recommendations to reduce the risk and an action plan to ensure implementation of the recommendations. The following concepts should be taken into account:

1) *Prioritization*

LRSTs must ensure that their decisions are prioritized according to the “safety risk tolerance” assessment. For example, if they determine that “operation can continue” given the assessed level of safety risk, their recommendations should reflect a strategy in which improvements are implemented as resources become available. Conversely, if they determine that “the operation can proceed only with measures to reduce the risks of the consequences occurring,” their recommendations should reflect a strategy requiring immediate action to eliminate the consequences of the hazard. At the same time, the time frame for performing actions must be commensurate with the corresponding risk levels.

2) *Control strategies*

Security risk is controlled by considering either:

1. the likelihood of consequences;
2. level of severity of consequences; or

3. both at the same time.

Safety risk mitigation measures are actions that often result in changes to operational procedures, equipment or infrastructure. Safety risk mitigation strategies fall into three categories:

a) Risk avoidance: An operation or activity is canceled or not carried out because the safety risk outweighs the benefits of continuing the activity, and the safety risk is thereby eliminated.

b) Risk reduction: The frequency of an operation or activity is reduced or measures are taken to reduce the impact of the associated safety risk.

c) Isolation: Measures are taken to isolate the effects of the risk or build up reserve capacity to protect against these effects.

3) *Evaluation of alternative solutions*

During this process, the LRST should explore several safety risk control strategies. These strategies must be evaluated against each other to find the most effective and efficient solution using objective and subjective measures. These measures may include criteria such as conducting a cost-benefit analysis, determining the feasibility of the proposal, assessing acceptability to stakeholders, and others. However, in all cases, the LRST must conduct a risk assessment of the proposed solution and assess any potential hazards posed by their strategy.

However, just because a solution is easy to implement, cost-effective, and acceptable to all stakeholders does not mean it will reduce risk. The effectiveness of a strategy in reducing risk is assessed by the residual or remaining risk after the strategy has been put in place. The risk assessment must determine whether the remaining (residual) risk is acceptable or whether additional solutions and risk mitigation measures are required.

d) *Notification of interested parties*

If the LRST determines that either a mitigation strategy is required or that part of the operation must be changed or suspended, it must make a formal recommendation to the organization responsible for that part of the operation and include a justification and risk assessment.

The outcome of the entire process is a master register of identified hazards, ongoing control and protection measures, risk analysis and results, additional control and mitigation measures, an implementation action plan and residual risk. Appendix C to this document contains Form **Ddocumenting runway safety management processes**, which can serve as a tool for recording hazards and associated processes.

6.4 Record keeping - data exchange

Proper and structured record keeping of observed and identified hazards, safety events and corrective actions allows for trend analysis. The LRST shall designate a person responsible for maintaining the database and may provide reports and analyzes upon request by LRST members.

Sharing and exchanging data among team members increases the efficiency of LRST. It is recommended that LRSTs from different airports develop an agreement that allows data to be shared across different locations and supports teams in identifying appropriate runway safety risk management strategies.

Appendix B - Checklist for internal audit of the effectiveness of the local working group on runway safety - LRST

Paragraph	Question	Answer	Proof
1. Terms of Reference for the Runway Safety Team			
1.1	Has the authority of the Runway Safety Team (LRST) been approved?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.2	Does the position define the scope of the LRST?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.3	Does position define roles for LRST members?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.4	Does the regulation govern the processing of data/reports received from participating organizations?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.5	Does the provision describe the decision-making process that must be used by the LRST?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.6	Does the provision specify a process for resolving disagreements among LRST members?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2. Hazard identification			
2.1	Does the LRST have a formal system for collecting and processing safety data to document operational hazards?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

2.2	Do all LRST members contribute to the formal safety data system by sharing information about identified operational hazards?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.3	Does the LRST identify and document the specific consequences of operational hazards?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3. Safety risk management			
3.1	Does LRST have a formal operational risk management process?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.2	Does the risk management process evaluate the consequences of operational hazards in terms of their likelihood and severity?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.3	Is there a formalized process for determining the level of risk an LRST is willing to accept?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.4	Does LRST develop risk mitigation strategies to control the level of risk in the operating environment?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.5	Is there a formalized process for preparing LRST recommendations to relevant stakeholders?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.6	Is there a formalized process for documenting decisions made by the LRST in the risk management process?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.7	Are decisions made by the LRST periodically reviewed to determine whether the desired effect of the mitigation/recommendations has been achieved?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4. Communication			
4.1	Does LRST have a formal process for engaging with relevant stakeholders?	<input type="checkbox"/> Yes <input type="checkbox"/> No	



4.2	Does LRST periodically provide runway safety materials to key personnel?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4.3	Does the LRST participate in information sharing activities with other LRSTs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4.4	Does LRST request safety-related information from all airport users?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Continuous improvement			
5.1	Does LRST have a formal process for continuous improvement of its business processes?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5.2	Does LRST periodically review work group composition, work group regulations, and action plans to ensure improved runway safety?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5.3	Are the results of the continuous improvement program documented?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Appendix C - Runway Safety Management Process Documentation Form

Runway Safety Assessment Form					
Link:	Start date:	Date of completion:			
general information					
Airport:	Which areas are affected:	<input type="checkbox"/> Runway	<input type="checkbox"/> Taxiway	<input type="checkbox"/> Apron	<input type="checkbox"/> All
Specific ID (Runway/Taxiway ID):					
Description of the safety issue					
Security Risk Type:	<input type="checkbox"/> Overrunning the runway <input type="checkbox"/> Abnormal landing	<input type="checkbox"/> Runway incursion - Airplane <input type="checkbox"/> Runway incursion – Ground vehicle	<input type="checkbox"/> Strike with wild animals <input type="checkbox"/> Bird strike	<input type="checkbox"/> Landing and takeoff from an undesignated runway <input type="checkbox"/> Other (Specify)	
Has an incident occurred or is this a hazard (potential outcome):	<input type="checkbox"/> Result (The incident occurred) <input type="checkbox"/> Potential Outcome (No incident occurred)			Date of incident:	
Description of actual or potential outcome					
Confirmation document: <input type="checkbox"/> Case Report <input type="checkbox"/> Incident Report <input type="checkbox"/> Audit report <input type="checkbox"/> Other (Specify.)					
Security issues					
<input type="checkbox"/> Navigation Aids <input type="checkbox"/> Runway/Taxiway Markings <input type="checkbox"/> PAPI <input type="checkbox"/> Communication	<input type="checkbox"/> Meteo <input type="checkbox"/> Obstacles <input type="checkbox"/> Approach lights <input type="checkbox"/> Runway/Taxiway Lights	<input type="checkbox"/> Unstabilized approach <input type="checkbox"/> Runway surface condition <input type="checkbox"/> Construction works <input type="checkbox"/> Procedures	<input type="checkbox"/> other		
<p>Once you have completed identifying security issues, please submit the form to register this report. During a runway safety team meeting, you should consider each report as an agenda item. The following sections are provided as a tool for managing meeting outcomes.</p>					
Risk assessment					
(The risk assessment must be completed as part of the runway safety team meeting)					



What is the severity of the risk: Catastrophic Dangerous Means. Minor Insignificant.

What is the probability of occurrence: Often Sometimes Very rare Unlikely Highly unlikely

Risk level (from the lower risk table) Invalid Acceptable Acceptable

If the risk is unacceptable and acceptable, a corrective action plan is required

<i>Риск для безопасности полетов</i>		<i>Серьезность риска</i>				
		<i>Катастрофическая А</i>	<i>Опасная В</i>	<i>Значительная С</i>	<i>Незначительная D</i>	<i>Ничтожная E</i>
<i>Вероятность</i>						
Часто	5	5A	5B	5C	5D	5E
Иногда	4	4A	4B	4C	4D	4E
Весьма редко	3	3A	3B	3C	3D	3E
Маловероятно	2	2A	2B	2C	2D	2E
Крайне маловероятно	1	1A	1B	1C	1D	1E

Corrective Action Plan

(The corrective action plan is based on recommendations from the runway safety team and must be completed as part of a runway safety team meeting)

Description of action plan:

Description of the action element:

Executing: Date of implementation: Status:

Description of action plan:

Description of the action element:

Executing: Date of implementation: Status:

Appendix D- Tool for planning meetings of the working group on runway safety operations"

1. Planning a meeting

- a) date
- b) time
- c) location

2. Determine your invitees

- airfield operators;
- air traffic services authorities;
- commercial air carriers;
- representatives of the flight personnel familiar with the airfield;
- general aviation representatives (if applicable);
- technical experts from air traffic controllers' associations; And
- technical experts from pilots' associations.

The team may also include:

- authorized organization;
- government aviation representatives (if applicable, based on airport sharing or other military functions);
- support services (anti-icing, catering, ground handling, etc.);
- emergency response service providers;
- experts in the relevant field (meteorologists, ornithologists, accident investigation authorities, etc.) (by invitation); And
- Consideration may be given to periodically inviting members of other LRSTs to facilitate information exchange and training.

3. Plan topics to discuss

- a) Three weeks before the date of the meeting:
 - notify interested parties of the date, time and location of the meeting;
 - ask for opinions on agenda items from each participant.

b) Two weeks before the date of the meeting:

- schedule an inspection of the airfield (as necessary);
- send the preliminary agenda to the working group members.

c) One week before the date of the meeting:

- summarize updates and information received from participants;
- Distribute the final agenda and supporting documents to the working group members.

4. Organizing a meeting

a) confirm the presence of participants;

b) plan a conference room appropriate to the size and requirements of the LRST;

c) coordinate the departure to the airfield with the airport management, tower, etc., including the availability of a vehicle and an accompanying person.

Appendix E - Program of meetings of the working group on runway safety

1. Planning a meeting

- a) date
- b) time
- c) location

2. List of invited persons

- airfield operators;
- air traffic services authorities;
- commercial air carriers;
- representatives of the flight personnel familiar with the airfield;
- general aviation representatives (if applicable);
- technical experts from air traffic controllers' associations; And
- technical experts from pilots' associations.

The team may also include:

- authorized organization;
- government aviation representatives (if applicable, based on airport sharing or other military functions);
- support services (anti-icing, catering, ground handling, etc.);
- emergency response service providers;
- experts in the relevant field (meteorologists, ornithologists, accident investigation authorities, etc.) (by invitation); And
- Consideration may be given to periodically inviting members of other LRSTs to facilitate information exchange and training.

3. Previous meeting agenda

[View the execution status of previous protocol decision activities and update the database accordingly]

4. New meeting agenda

[Participants present new projects, hazards or events identified within their safety management systems. The team then: (a) identifies hazards, (b) conducts a safety risk assessment, and (c) makes recommendations for safety risk management].

5. Registration of results

[Documentary findings and action plan]

6. Next group meeting

[Agree on the date, time and place of the next meeting]

Note.—The purpose of an airfield inspection and field visit is to identify existing and new hazards and to observe corrective actions that have been taken based on previous findings.

Appendix F - ICAO Runway Safety Toolkit

The ICAO Runway Safety Toolkit is designed to achieve three main objectives:

1. Raise the level of awareness of all participants about the dangers that accompany unauthorized runway activities;
2. identify the most common hazards and describe why they occur; And
3. provide practical solutions and best operating practices that will improve runway safety.

To best achieve these goals, the toolkit is organized according to user interests. Some sections are intended for all users, as is much of the supplementary material. Most of the core content is presented in functional area sections as follows:

1. Air traffic control;
2. flight operations;
3. airfields and ground facilities;
4. management responsibilities.

The Air Traffic Control section contains information relevant to air and ground controllers responsible for the movement of aircraft. “Flight Operations” applies to pilots of aircraft of all types and sizes. The Aerodromes and Ground Facilities section is intended primarily for ground vehicle operators, but is applicable to all airfield users. The final category, “management responsibilities,” provides information for those who are able to make decisions above the day-to-day operating level. Each of these functional areas includes a quiz section that allows users to test their knowledge upon completion of the training.

In addition, a large amount of additional information is included in the toolkit. The glossary defines terms related to runway safety, and the appendix contains ICAO provisions on runway safety. The Links section contains information about websites and reference materials related to runway safety. The poster section contains sample runway prevention posters that can be downloaded for printing and display. It also includes videos produced by various countries. The seminar section is a selection of selected presentations from previous ICAO-sponsored runway safety conferences.

Finally, Human Factors considerations were incorporated into the discussions and decisions presented in the Manual. Thus, the emphasis will be on human actions rather than on technical means of protection.

The manual can be downloaded from the ICAO website at:
<https://www.icao.int/safety/RunwaySafety/Pages/RnwyTlkt.aspx>