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Manual on Ground Handling

First Edition, 2019



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AMENDMENTS

Amendments are announced in the supplements to the *Products and Services Catalogue*; the Catalogue and its supplements are available on the ICAO website at www.icao.int. The space below is provided to keep a record of such amendments.

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FOREWORD

Ground handling forms a significant and critical part of the aviation industry. Larger aircraft, an increase in ground support equipment and faster turnarounds all contribute to the challenge of improving operational safety. With the growth of air traffic and the proliferation of third party ground handling companies, ground operations on airport aprons have become increasingly complex and potentially hazardous.

It is important that the safety, reliability and consistency of flight operations continue on the ground. Apron areas are often the most congested and busiest areas of an airport with aircraft turnarounds being carried out under significant space and time constraints. Unlike other areas of the aviation industry, the ground handling sector is currently not subject to the level of regulation in areas such as flight operations, air traffic management and aerodrome operations. However, some States already plan to better regulate ground handling activities.

For several years the air operator, aerodrome and ground handling sectors of industry, together with a number of State regulators, have been concerned with the level and extent of damage to aircraft during ground handling and the rate of safety occurrences to aircraft, passengers and airport workers. This concern continues to be shared internationally by various groups and organizations.

The *Manual on Ground Handling* addresses these concerns and was developed in close cooperation with industry representatives to benefit from the experience and expertise of those working “hands on” in aircraft turnaround operations.

The guidance in this manual represents “accepted industry good practice” that has been proven in the field. Care should be taken when using the material and guidance as it might not be applicable or appropriate for use in all States or organizations. There may also be some overlap with State occupational health and safety regulations that protect personnel working airside; however, this manual shows how both aircraft and personnel safety can be included in an appropriate safety management system (SMS).

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GLOSSARY

DEFINITIONS

When the following terms are used in this manual, they have the following meaning:

Aerodrome. A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

Aircraft Operator. A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Commercial air transport operation. An aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire.

Dangerous goods. Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions.

Note.— Refer to Chapter 3 of Annex 18 — The Safe Transport of Dangerous Goods by Air for dangerous goods classification.

General aviation operation. An aircraft operation other than a commercial air transport operation or an aerial work operation.

Ground handling. Services necessary for an aircraft's arrival at, and departure from, an airport, other than air traffic services.

Industry codes of practice. Guidance material developed by an industry body, for a particular sector of the aviation industry to comply with the requirements of the International Civil Aviation Organization's Standards and Recommended Practices, other aviation safety requirements and the best practices deemed appropriate.

Note.— Some States accept and reference industry codes of practice in the development of regulations to meet the requirements of Annex 19 — Safety Management, and make available, for the industry codes of practice, their sources and how they may be obtained.

Operations manual. A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

Safety management system (SMS). A systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies and procedures.

ABBREVIATIONS AND ACRONYMS

A-CDM	Airport collaborative decision-making
ADP	Airside driver permit
APOC	Airport operations centre
APU	Auxiliary power unit
AVP	Airside vehicle permit
CAA	Civil aviation authority
ERP	Emergency response plan
FOD	Foreign object debris
GHSP	Ground handling service provider
GSE	Ground support equipment
IMS	Integrated management system
OSHE	Occupational safety, health and environment
PPE	Personal protective equipment
SMS	Safety management system
SOP	Standard operating procedure
SPI	Safety performance indicator
SPT	Safety performance target
SSP	State safety programme
ULD	Unit load device

Chapter 1

INTRODUCTION

1.1 SCOPE

1.1.1 The intent of this manual is to address the ground handling services that form an integral part of the aviation system and contribute directly to flight and aerodrome safety. The content of this manual provides guidance for all stakeholders involved in the ground handling of aircraft that might impact the safety of operations. This impact should be assessed locally as the hazards, risks and resulting risk management and mitigation measures may need to be tailored to specific circumstances or be site specific.

1.1.2 Ground handling is defined in Annex 6 — *Operation of Aircraft* as “services necessary for an aircraft’s arrival at, and departure from, an airport, other than air traffic services”. A list of these services is provided in Appendix B of this manual. Annex 14 — *Aerodromes*, Volume I — *Aerodrome Design and Operations* does not specifically refer to ground handling but contains provisions on apron management service, ground servicing of aircraft, aerodrome vehicle operations and surface movement guidance and control systems, including safety requirements relating to ground handling. Aerodrome operators have responsibilities relating to the safety of operations at the aerodrome including those that take place in the terminal area and on aircraft stands. These responsibilities also cover the provision of facilities and the protection of personnel and passengers. Organizations that provide ground handling may be subject to licensing or other authorization criteria set by the aerodrome operator.

1.1.3 Annex 19 — *Safety Management* defines safety as “the state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level”. Annex 19 also defines a safety management system (SMS) as “a systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies and procedures”.

1.1.4 This manual brings together the ground handling operation and the principles of SMS to highlight safety improvements in the overall system for ground handling service providers (GHSPs) as well as air and aerodromes operators. It also provides guidance for States to assist with the inclusion of ground handling in their State safety programmes (SSP).

1.1.5 Ground handling services, both for commercial air transport and general aviation, aim to maintain the regularity and efficiency of flight and aerodrome operations. Ground handling services can be provided by an air operator, an aerodrome operator or an independent company. When provided by an air operator or an aerodrome operator, this entity is considered, for the purposes of this manual, as a GHSP. In such cases, the relevant interfaces, internal to the organization or as otherwise appropriate, should be established for the management of safety.

1.1.6 There are market and operational differences that apply for general aviation operations. The basic provisions aimed at GHSPs contained in this guidance document acknowledge these differences and consider specific provisions to accommodate them. Guidance for general aviation can be found in 3.5.

1.1.7 Since ground handling involves various stakeholders operating through complex interactions, guidance is provided in the next chapters for States, air operators (including general aviation), GHSPs, as well as aerodrome operators, as shown below in Table 1-1. All stakeholders shall, as a minimum, comply with the laws, regulations and procedures of those States in which their operations are conducted.

Note.— Some of the ground handling services discussed in this manual are already addressed by existing ICAO Standards and Recommended Practices (SARPs) or industry provisions, e.g. aircraft maintenance is covered by Annex 8 — Airworthiness of Aircraft, or aircraft fuelling is addressed in the Manual on Civil Aviation Jet Fuel Supply (Doc 9977). These other provisions should be considered in conjunction with the guidance included in this manual.

Table 1-1. Structure of the manual

<i>Chapter 1</i> <i>Introduction</i>	<i>Chapter 2</i> <i>Guidance for States</i>	<i>Chapter 3</i> <i>Guidance for air operators</i>	<i>Chapter 4</i> <i>Guidance for GHSPs</i>	<i>Chapter 5</i> <i>Guidance for aerodrome operators</i>	<i>Chapter 6</i> <i>Operational interfaces — Processes and policies</i>
• Scope • Safety in ground handling • Safety culture • Safety management • Importance of standard operating procedures (SOPs) • Contribution of industry organizations	Assess the impact of ground handling for the SSP ↓ Ensure the impact is managed and Determine appropriate safety promotion actions	GHSP / air operator relationship SMS interfaces with GHSPs Provision of SOPs Emergency response plan (ERP) interfaces General and business aviation specifics	GHSP organizational requirements Implementation of safety management principles Requirement for SOPs Coordination Human factors Temporary staff Training Equipment Occupational health and safety	GHSP / aerodrome operator relationship SMS interfaces with GHSPs Operational safety considerations Apron design Coordination ERP interfaces	General safety (walking, driving, foreign object debris (FOD), adverse weather, etc.) Turnaround activities (marshalling, loading, etc.)
Appendices: references, list of ground handling services, examples.					

1.2 SAFETY IN GROUND HANDLING

1.2.1 Safety must be a priority for any organization involved with aviation. The information contained in this manual, if followed, should lead towards an acceptable level of safety to aircraft, infrastructure, equipment and third parties. Ground damage and staff injuries have significant direct and indirect costs and cause major disruptions in operations. In addition, undetected or unreported errors when servicing the aircraft can affect its load and balance, aerodynamics, airworthiness or performance. These errors occur much less frequently, but their consequences can be catastrophic.

1.2.2 There has been much debate as to the direct and indirect costs of damage to aircraft but it is suggested to be billions of United States Dollars (USD) per annum; the ground damage rate is currently around 5 per 10 000 movements. GHSPs often calculate the cost of damage and repair to an aircraft, while air operators add lost revenue, compensation and delay. There is also the cost of personal injury and fatalities to ground personnel.

1.2.3 Despite considerable efforts by air and aerodrome operators, GHSPs and regulators, serious accidents and incidents still occur. This suggests that there are still many areas of improvement needed. Some of the main causal factors are:

- a) staff issues which include quality of training, shortages, low wages, unattractive working conditions, high turnover, absenteeism, excessive overtime and fatigue;
- b) continued competition between service providers for ground handling contracts driven by air operators looking for the lowest costs in third party operations. This results in GHSPs struggling to maintain appropriate staffing levels;
- c) difficult working conditions, including apron congestion with equipment and vehicles, and operations at night or in poor weather conditions;
- d) a conflict between efficiency (such as “on-time departure” performance) and the use of safe working practices;
- e) pressure on staff resulting from increasingly short turnaround times;
- f) an underdeveloped safety culture within organizations; and
- g) issues arising from maintenance and operability of ground support equipment (GSE), including aging equipment.

1.2.4 Many incidents can occur in the brief period before aircraft departure when few safety nets exist and there are commercial pressures for on-time departures. Reports from industry show a significant percentage of ground damage and loading errors are “found on arrival” indicating a large number of aircraft are dispatched with unreported damage or potential weight and balance errors. Increasing economic pressure faced by industry to cut costs can lead to a lack of quality control, unsafe working practices, reduced staff training and lower quality of GSE maintenance. The outsourcing of ground handling operations, while providing some financial efficiencies, should not be seen by the air operator as a way of transferring risk and responsibility.

1.2.5 A GHSP has to strike a balance between profitability and safety, therefore a balance between service performance and safety performance needs to be achieved. It should never be the case that safety procedures are broken to achieve service targets. This is developed further in the *Safety Management Manual* (Doc 9859) through safety risk management and the concept of “safety space”.

1.2.6 The ability to provide ground handling services in a safe manner is also challenged by an evolving environment, in particular due to aircraft, which are increasing in size and number, often requiring more, larger or complex GSE. Available space on the apron is often constrained and allotted time for turnaround ever more reduced. The GHSPs also have to evolve quickly to cater for changing air operator business models.

1.2.7 A significant change over the past few years has been the propensity for ground handling to be outsourced by the air operators. Globally, it is estimated 75 per cent of all ground handling operations are outsourced to third party handlers.

1.2.8 Ground handling competition has been a very important issue over the past few years leading to both positive and negative developments. Competition has without a doubt reduced costs and provided air operators who outsource their ground handling operations with improved choice of provider. However, there has been continued pressure on independent GHSPs to reduce the costs of their operations. The desire for GHSP sustainable profitability while delivering services to air operators, often struggling with their own profitability, has resulted in a difficult operating environment. There appears to be a drive from air operators to negotiate for the lowest handling fees possible while the GHSPs attempt to secure the critical mass to survive and invest for the future. Ultimately, there needs to be a balance between competition, cost efficiency and safety.

1.2.9 While air operators and aerodrome operators are regulated by States, GHSPs are generally not directly regulated. As a result, there are no globally applicable regulatory provisions for ground handling. There are, however, industry-developed and implemented standards for the management and operation of ground handling services and standardized operational procedures, and an associated audit programme.

1.3 SAFETY CULTURE IN GROUND HANDLING

1.3.1 Annex 19 highlights the need for States and service providers to promote a safety culture. For a GHSP this should be an expression of how safety is perceived, valued and prioritized by management and personnel. A safety culture is a set of values, behaviours and attitudes regarding safety issues shared by every member at every level of the organization. A safety culture should be the normal, everyday operating mode and part of everyone's behaviour, not optional or discretionary. Good indicators of a positive safety culture are:

- a) a positive attitude and awareness of all staff towards known hazards, safety risk management and compliance processes with agreed control and mitigation measures;
- b) an environment which allows continuous improvement and safety enhancements, shown by the capacity to learn from accidents, incidents, near misses and other safety indicators;
- c) a willingness for management, supervisors and staff to discuss safety and operational issues and an ease of transmitting safety-related communications across the organization; and
- d) continuously evaluating safety-related behaviours across the organization shown by positive supervision and oversight of operations, which works with staff to identify and develop safe working practices.

1.3.2 The greater the number of employees that show these behaviours and characteristics, the better will be the safety culture. Safety culture should be meaningful to GHSP's personnel and is often reflected in how they think, talk and act. The maturity of a safety culture will have a direct impact on safety performance. If employees believe safety is not important then non adherence to standard operating procedures (SOPs), corner-cutting and workarounds will result. A safety culture should exist at all times, not just when a manager or a regulator is watching. It has been suggested that a safety culture is an intangible concept whose true worth is only perceived by its absence.

1.3.3 GHSPs vary considerably in their size, organizational makeup and service provision. There is also a wide number of large private GHSPs operating in multiple States, others that are State-owned or operated by an aerodrome, and some that are small and only operate in one State. This diversity will affect the maturity of the safety culture globally. There are significant national cultural differences affecting how an individual is perceived in society. The organizational culture may therefore be significantly affected by the national culture and this may provide some difficulties for multinational companies trying to develop an SMS.

1.3.4 Care needs to be taken when operating with a multicultural workforce as safety risk perception, communication, job status and leadership style will vary. Similarly, reporting culture varies widely with many cultures not adhering to or using an open reporting or just culture system. If GHSP staff avoid reporting for fear of losing their jobs then valuable data and information on safety will be lost. This is one of the main barriers to operating an open reporting or “just culture” system. A just culture is one that is fair and encourages open reporting of accidents and incidents. However, it does not tolerate deliberate harm and wilful damaging behaviour.

1.3.5 A poor safety culture would be represented by an organization that, in effect, encouraged non-compliance with safe working practices or SOPs. Poor safety culture is often reflected in poor performance in other areas such as training, supervision, and vehicle and equipment management. A significant number of accidents can be traced to unsafe behaviours. Poorly designed equipment or operations, poor systems and poor working conditions can all encourage unsafe behaviours.

1.3.6 As with SMS, the promotion of a safety culture is critical and begins with the accountable executive. It is transmitted through agreed policies, training and promotional material. Safety culture maturity and effectiveness can be assessed through various methodologies including, but not limited to, interviews, staff surveys and observations.

Note.— The “accountable executive” is known in many States as “accountable manager”.

1.4 SAFETY MANAGEMENT IN GROUND HANDLING

1.4.1 An SMS provides a business-like approach to safety. It should therefore be seen as a business tool helping GHSPs manage risks and making the right business decisions. The “ownership” of safety processes belongs with an organization’s management. Senior managers are in the position to weigh safety risks against the cost of mitigation, and where priorities and resources are allocated. Managing safety does make good business sense in aviation and many good practices are also applicable to good business practice.

1.4.2 The use of a SMS and its principles provide accountable executives and operational managers a method for managing safety resulting in a set of beliefs, systematic practices and procedures for mitigating and monitoring safety. The implementation of SMS in aviation is relatively new; however, the principles have been in use by other hazardous industries, such as petrochemicals and nuclear, for much longer.

1.4.3 Accidents, incidents and occurrences will still happen even with an SMS. However, the system will assist an organization to be proactive as well as reactive in controlling known risks using a framework or structure that can improve the effectiveness of its operation. The use of safety management principles has proven its efficiency in safety-critical industries including aviation. They contribute to preventing accidents and incidents, and have proven to have a positive cost-benefit ratio considering the financial impact these events could have.

1.4.4 ICAO has required the use of SMS in a number of aviation sectors for many years and is gradually expanding SMS to other sectors. While currently the ground handling sector is not required to have an SMS, many States already require it and this manual strongly recommends that SMS principles, combined with industry best practice, should be adopted by GHSPs.

1.4.5 In circumstances where an air operator with a functioning SMS contracts services from a GHSP, the hazards and safety risks resulting from the GHSP's activities should be addressed by the SMS of the air operator. However, in cases where both the air operator and GHSP have their own SMS then the safety responsibilities and interactions of both systems should be coordinated.

1.4.6 Key to the success of an SMS is the full involvement by accountable executives and senior managers. These senior positions usually control budgets and can allocate resources to safety. Accountability not only lies with senior management for their own organization but also the safety assurance of third parties. SMS can help with this by ensuring safety is a consideration in all third party contracts. An important concept is that accountability cannot be delegated; however, responsibility can be delegated and it is acceptable for other managers and supervisors within a GHSP to manage safety on a day-to-day basis.

1.4.7 There are a number of key principles that need to be applied for a ground handling company to benefit from the investment in safety management. Principles highlighted by safety professionals and organizations globally as key components of a world class system include:

- a) **Effective policies and SOPs developed with the involvement of the GHSP's personnel and relevant stakeholders.** Successful organizations have used a systems approach to safety management by using and adapting industry standards and best practice guidance. An integrated approach across safety, quality, security and environment allows processes and values to become embedded in the way a company does business.
- b) **A proactive method of hazard identification and safety risk assessment/management.** Many of the hazards associated with ground handling that have been identified are known to industry. It is critical that a GHSP provides appropriate safety risk assessment and mitigations to these hazards and makes them known to staff. It is important to note that some of the hazards encountered when working on the apron are generated by third parties or other organizations working as part of aircraft turnarounds.
- c) **Competent and trained personnel with regular refresher programmes.** An initial and ongoing training programme allows an organization to strengthen the skills each employee needs to carry out their job. Further development and "refresher" training brings all personnel to a higher level of competence, skills and knowledge.
- d) **A strong process of monitoring and reviewing activities and change management.** Business models are constantly evolving and changing, and operational changes can result in new hazards being generated and risk assessed. Hazards from change can occur, for example, from the introduction of new handling equipment, air operators changing aircraft type or the introduction of seasonal personnel.

1.4.8 An accountable executive can demonstrate a positive approach to safety management by:

- a) "Walking the Talk" — the accountable executive is a role model and personnel watch and listen to their actions and words. When they are out at locations, offices, airports and out stations they always use the opportunity to discuss and promote safety. Their actions reflect their beliefs and encourage personnel to commit time and effort to ensuring and improving safety. The accountable executive leads from the front at all times.
- b) Creating a positive safety culture — key to this is the development and acceptance of an open reporting culture with appropriate non-disciplinary policies that allow lessons to be learnt from accidents and incidents. A positive safety culture allows senior management to get a true picture of what is going on with their operation and to better understand the risks.

- c) Inspiring personnel through a safety vision — safety policies and vision or mission statements need to be brought to life so that they become an ingrained part of everyday work. This includes emphasizing to all staff that safety matters and their input is needed to support safety objectives and incident reporting processes.
- d) Leading safety forums — it is vital that the accountable executive leads the highest level safety meetings. It is also important to be seen at all safety meetings, regardless the level, to show support and promote the safety culture.

1.4.9 Appendix 2 of Annex 19 highlights four components and 12 elements as the minimum requirements for SMS implementation. The degree and depth of detail for each element will depend on the size and complexity of the individual GHSP and the concept of scalability should be applied. The framework is described in Table 1-2 below. Further details on what these mean for a GHSP may be found in Chapter 4.

Table 1-2. Annex 19 framework for an SMS

<i>Components (4)</i>	<i>Elements (12)</i>
1. Safety policy and objectives	1.1 Management commitment 1.2 Safety accountability and responsibilities 1.3 Appointment of key safety personnel 1.4 Coordination of emergency response planning 1.5 SMS documentation
2. Safety risk management	2.1 Hazard identification 2.2 Safety risk assessment and mitigation
3. Safety assurance	3.1 Safety performance monitoring and measurement 3.2 The management of change 3.3 Continuous improvement of the SMS
4. Safety promotion	4.1 Training and education 4.2 Safety communication

Scalability

1.4.10 The safety management processes implemented by a GHSP should be commensurate with its size and the complexity of its services.

1.4.11 The principles of good SMS apply to all organizations, companies and operators irrespective of their size and complexity of operation. The four components and 12 elements of the ICAO SMS framework can be used appropriately for both large and small organizations alike. Scalability does not mean picking particular elements; all the elements are applicable but will vary in scale. The individual GHSP should carry out an analysis of its activities to determine the right level of applicability and resource to manage its SMS. Even small GHSPs could be involved in activities having significant safety risks or be affected by other organizations working around them.

1.4.12 Many GHSPs already have an SMS in place and recognize the benefits this brings to their business. These benefits can be equally obtained by small, medium and large providers. The key benefits of using SMS principles are: compliance with regulations; the ability to win and retain contracts; the avoidance of business disruption; and the

motivation and retention of key staff. For small organizations, the low volume of incidents and safety data will mean it is more difficult to identify trends. Other more qualitative means of assessing safety might be required such as safety meetings and collaborating with other service providers or industry representative bodies.

Note.— Further information on scalability can be found in Doc 9859 and the Safety Management International Collaboration Group's (SM ICG) SMS for small organizations.

Interfaces between organizations

1.4.13 Annex 19 states that “[a] service provider’s interfaces with other organizations can make a significant contribution to the safety of its products or services”. The SMS of the air operator, aerodrome operator and GHSPs should interact effectively. Chapters 3 and 5 of this document include a focus on the safety management interfaces with GHSPs, and the air and aerodrome operators.

1.4.14 The GHSP should be aware of the interfaces that exist between itself and other companies or organizations as well as parts of its business that might influence its safe operations. The SMS should list and indicate both internal and external interfaces. Once the interfaces have been recognized, the GHSP should consider the critical nature of each interface. Important to the interface is whether the organization has an SMS and whether data sharing is required. The GHSP should identify any hazards related to the interfaces and carry out joint hazard analysis and safety risk assessments. For a GHSP, the critical interfaces will be with the air operator it contracts with and the aerodrome operator on whose property they operate and facilities they use. Collaboration between each of these three key stakeholders is critical to ensuring a safe operation. Each organization has the responsibility to identify and manage hazards that affect their own organization. Operational safety benefits can be achieved through an enhancement of safety as a result of shared ownership of safety risks. This also allows transfer of knowledge and working practices that could improve the effectiveness of either organization.

1.4.15 As part of ensuring the safety performance of outsourced services, air operators must ensure sufficient oversight of their GHSPs. In addition to audits from the various operators they contract with, GHSPs may be audited by aerodrome operators and/or States as part of their safety assurance tasks. Industry organizations have developed auditing programmes that provide common sets of standards and are aimed at reducing the risk of ground damage and personnel injuries.

1.4.16 Harmonized standards and standardized procedures are the backbone of ICAO regulations. They are also the basis of safety assurance, increased safety performance and efficient operations. In the absence of global regulations for ground operations, there is a risk that regulations and the resulting standards and procedures are developed and implemented within States on an ad hoc basis and without regard to harmonization. This situation not only hinders global standardization but may also create additional safety risks. Programmes exist that have established standards and procedures for ground operations that reflect industry best practices. The standards and procedures are implemented through audit programmes that replicate State oversight activities, assessing the management capabilities (including validating the implementation of safety management principles) as well as the operational performance of a GHSP against published audit checklists and by onsite observations. The industry-based programmes may also include a registration scheme with periods in which audits must be repeated to ensure continual conformance to the standards. The standards and procedures are also continually reviewed and updated by industry experts to remain current, address new safety risks, and incorporate new technology. The audit checklists are similarly maintained.

1.4.17 Industry-based auditing programmes also aim to reduce the number of audits conducted by air operators to which GHSPs are subjected. In some cases, the GHSP is audited by different airlines against the same criteria on a regular and frequent basis. This practice, although meeting the airlines’ regulatory obligations, is a tremendous burden on the GHSP which has to take relevant staff off line to accommodate the audits that seem to be an unnecessary duplication. A single audit performed by the industry-based audit programme and the resultant audit report may, if recognized by the relevant stakeholders, be used by the airlines to replace the duplicating audits (e.g. IATA Safety Audit for Ground Operations (ISAGO) Programme and IBAC International Standard for Business Aircraft Handling (IS-BAH) Programme).

Note.— Further guidance on interface management as it relates to SMS is provided in Doc 9859.

Management systems

1.4.18 GHSPs typically provide ground operations and other services for customer air operators at multiple airports, which may be located in different States. The GHSP corporate headquarters and legal identity may also be in a different State. The GHSP may also hold different legal identities if so required by the State in which it operates. This can create a complex organizational structure and management framework. However, there should be a common set of management systems for the provision and oversight of all ground services provided by the GHSP throughout its network of operations. In addition, the processes and procedures implemented by the GHSP for the ground operations should be developed on industry best practices and wherever possible standardized, especially for aircraft types.

1.4.19 The corporate management systems, which include safety, security and quality, should exist at a corporate level and directly influence the way in which the service level agreements and other contractual arrangements made with customer airlines are executed. As advocated in this manual, the implementation of an SMS in the GHSP's organization is essential to address safety risks, reduce ground damage and personal injuries. The SMS should be compatible with the SMS required of an air and aerodrome operator.

1.4.20 When implementing safety management procedures, consideration should be given to interfaces with other requirements such as quality, performance, security, environmental or occupational health, and safety management. To a certain extent, implementation can be combined; a number of organizations already operate with an integrated management system.

Note.— Guidance on integrated management systems can be found in Doc 9859 and SM ICG's Safety Management System (SMS) Integration: Points to Consider.

1.4.21 These requirements may have different goals; care and coordination are needed when defining indicators or procedures that may impact several management objectives. Operational performance targets and indicators should be realistic and not have a negative effect on safety. For example, time-based performance targets (such as baggage delivery time) can lead to pressure affecting safety records, or occupational safety requirements can lead to procedures conflicting with safety requirements (such as placing high-loaders in firm contact with aircraft to reduce fall hazard for personnel, as opposed to placing them at a reasonable distance to avoid aircraft damage).

1.4.22 Other management systems that should be established at the corporate level and implemented throughout the network include documentation control, personnel training and asset/equipment procurement and maintenance.

1.4.23 An independent assessment of the GHSP's corporate management systems and oversight capabilities should be conducted on a regular basis. The assessment should also verify that ground operations are conducted throughout the network in accordance with corporate policies and procedures, and that local requirements are met. The local requirements include those set by the aviation authority, airport, or customer airlines.

1.5 SAFETY MANAGEMENT IS “GOOD FOR BUSINESS”

1.5.1 An SMS effectively gives a company or organization a way to control risks to their business. In aviation, managing safety should be seen as a core activity and not an “add on” process. In the ground handling sector many GHSPs already have an SMS in place, without any requirement from their regulator, through the adoption and implementation of industry-based standards. They have done this as they already see a direct safety benefit from its introduction and use. There will always be risks in the aviation business but there needs to be a balance and an SMS allows a systematic approach to identifying hazards, applying a formal safety risk assessment process and putting in place mitigations to reduce the risk to an acceptable and defensible level. SMS provides an objective framework and an organizational risk structure, which supports an organization with the management of safety and therefore business risk.

1.5.2 An effective SMS has been shown to provide many business benefits including:

- a) a clear and documented approach aimed at achieving safe operations that is understood by all personnel and other stakeholders with whom they are involved;
- b) the direct involvement of personnel and managers at all levels in understanding and managing the identified operational risks;
- c) the ability from this involvement to build a positive safety culture, which promotes open reporting and an ethos of learning from accidents and incidents;
- d) a constructive approach to applying mitigations and controls to hazardous operations carried out by the organization;
- e) a method for identifying and potentially removing operational inefficiencies;
- f) the possibility of decreasing insurance premiums, improving reputation and enhancing brand image and value, which allows better effectiveness in business tenders;
- g) its use as a defence from legal action and a proven method of showing compliance with State regulator requirements;
- h) a demonstration that a business is socially responsible and helps maximize the productivity of its workers; and
- i) building a more competent workforce of committed personnel able to function in a safe environment to the benefit of the company's profitability.

1.5.3 It is often suggested that an SMS is expensive and time consuming. There is no doubt that a commitment to implementing an effective SMS does require time, effort and financial inputs. There will be training and administrative costs but overall there will be a greater payback with organizations being able to better comply with regulations, help minimize injuries, lost time to personnel and damage to aircraft and equipment. Employees are more productive in a safe environment and many GHSPs have effectively introduced a voluntary management system where State regulations may currently not require its implementation. Therefore, the added value of an SMS should be seen as providing a workplace that is more efficient, more productive and the costs of injuries and damage significantly reduced. Many organizations have benefited from better legislative compliance, reduction of accidents and incidents, less wasted management time on accident investigation and a reduction in adverse publicity.

1.5.4 There are potentially longer term benefits, which include implementing improvements and reducing hazards to processes and procedures, the improvement in employee and equipment performance and avoidance of fines associated with non-compliance. Overall the benefits of an SMS far outweigh the costs of implementation and administration. A strong SMS, based on good practice, has significant benefits for the company, the personnel, its key stakeholders and regulators.

1.6 IMPORTANCE OF STANDARD OPERATING PROCEDURES

1.6.1 SOPs provide instructions to personnel on the “who does what, when and how” for the safe completion of their tasks. SOPs are mitigations to hazards and reduce safety risks; they are a safety enhancement to ensure that organizations publish and enforce clear, concise and accurate procedures that specify how an individual’s responsibilities are to be coordinated during the GHSPs’ activities. SOPs should be clear, comprehensive and readily available.

1.6.2 SOPs are the result of a careful process, often conducted over a period of many years, which considers all likely outcomes; deviation from an SOP may lead to an unexpected and unsafe outcome. Failure to follow established procedures has been found to be a causal factor in many accidents and serious incidents, as such SOPs are not discretionary and must be followed precisely as an effective method of avoiding accidents. Management at all levels must insist on the proper use of SOPs. However, deviations from SOPs may occur when the risk is not foreseen by the SOP and/or when following the SOP would affect safety. Any deviation should be recorded and analysed to improve understanding and to support the development of operational specific and appropriate procedures.

1.6.3 Initial training provides the opportunity to establish the disciplined use of SOPs and recurrent training offers the opportunity to reinforce that behaviour. Effective SOPs should be continually reviewed and renewed, and are the product of healthy collaboration at all levels within the organization.

1.6.4 The multiplicity of SOPs for the same task provided by different air operators, such as aircraft chocking and placement of safety cones, is confusing and counterproductive. Air operators, aerodrome operators and GHSPs should cooperate to develop and use a harmonized common set of procedures. Aircraft manufacturers, GSE manufacturers and States can also provide valuable contribution to such developments.

1.6.5 Industry organizations have developed standardized procedures covering both commercial aviation and general aviation based on current best practice (e.g. *IATA Ground Operations Manual* (IGOM) and IBAC IS-BAH).

1.6.6 The SOPs serve the purpose of describing how to safely undertake tasks and activities for operations but should also include aspects such as quality, performance, security, occupational health and safety. Organizations should encourage feedback on the effectiveness and applicability of SOPs to ensure they are fit to manage the risks associated with the tasks and operational conditions. The organization should have an open reporting system that encourages feedback on aspects of the organization, so that any issue can be investigated and corrected.

1.7 CONTRIBUTION OF INDUSTRY ORGANIZATIONS TO GROUND HANDLING SAFETY

1.7.1 Industry representative organizations (e.g. ACI, ASA, IATA and IBAC) provide services and resources contributing to safety improvement to their members, such as working groups, documentation, SOPs, guidance material, representation, safety data, etc.

1.7.2 Standardization bodies also provide services and resources such as working groups, documentation, guidance material, etc. Examples of standardization bodies are International Organization for Standardization (ISO), SAE International, European Committee for Standardization (CEN) and European Organisation for Civil Aviation Equipment (EUROCAE).

1.7.3 Aircraft manufacturers, GSE manufacturers and information technology (IT) providers also provide services and resources such as working groups with customers and users to review aircraft and GSE design, working groups to enhance and adapt GSE compatibility with the aircraft, documentation and training modules. Examples of documentation provided are the aircraft maintenance manual and the aircraft characteristics for airport planning.

1.7.4 In many States there will be a strong link to national occupational health and safety requirements for personnel working for GHSPs. Globally these will vary depending on the maturity of the national regulations but where they do exist they should be integrated into the aviation SMS requirements as the same safety principles apply. Some States already require SMS for all companies and organizations and have provided guidance on the integration of both aviation and occupational safety, which can be found in Appendix A. States should ensure aviation and occupational health and safety regulations are not in conflict.

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Chapter 2

GUIDANCE FOR STATES

2.1 GROUND HANDLING SAFETY

2.1.1 Given the increasing complexity of the global air transportation system and its interrelated aviation activities, strong coordination is required between all stakeholders to assure the safe operation of aircraft. ICAO supports the continued evolution of a proactive strategy to improve safety performance. The foundation of this proactive safety strategy is based on the implementation of an SSP that systematically addresses safety risks.

2.1.2 A number of States have identified, through their aviation risk management process, a number of areas or activities that should be included in the SSP. These States have specifically identified ground handling as requiring further investigation and possible action.

2.1.3 As part of their SSP, States should:

- a) assess the impact of ground handling operations on aviation safety (see 2.2);
- b) ensure this impact is managed according to a regulatory framework addressed to air operators, GHSPs and/or aerodrome operators (see 2.3); and
- c) determine appropriate safety promotion actions (see 2.4).

2.1.4 The SSP is an integrated set of activities aimed at improving aviation safety. The requirement for an SSP recognizes that States, as well as service providers, have safety responsibilities and provides a framework within which some organizations such as air operators, aerodrome operators or maintenance organizations are required to establish an SMS. As the ground handling sector is an important part of the aviation system, States should consider treating this area in the same way as other organizations by promoting the use of safety management principles as detailed in Annex 19. States can extend the applicability beyond that required in Annex 19 or promote the voluntary application of SMS by GHSPs. Doc 9859 gives guidance on this “Discretionary SMS applicability”. A number of ground handling organizations have voluntarily developed and implemented an SMS as part of the parent air operator SMS or as a standalone SMS for the GHSP itself.

2.1.5 States should weigh the possible safety benefits of extending an SMS against the added cost to industry and the regulator. Ultimately the extension of SMS into the ground handling domain should be seen as a positive move, which will bring benefits to the regulator and industry stakeholders. In circumstances where the State operates as the service provider there should be clear separation from the service provider and State oversight functions to ensure there is not a conflict of interest.

2.1.6 States working in conjunction with the air and aerodrome operators should provide guidance to GHSPs to develop safety management principles. If an SMS is developed by the GHSPs, it should correspond to the size and complexity of the activities and the hazards and associated risks inherent in these activities. An SMS does not have to be complicated to be effective. Regulators must allow GHSPs to “customize” or adapt their SMS, within the ICAO framework, to suit their particular type of operation. States should use the ICAO SMS framework to develop their own internal processes and also use these to provide oversight, guidance and encouragement to GHSPs. Some programmes, such as ISAGO, require a GHSP to implement an Annex 19-compliant SMS.

2.1.7 States should consider the safety, regularity of operations and economic impacts of competition, or the lack thereof, for ground handling services provided on aerodromes. In some cases these impacts can be either positive or negative. States should determine the appropriate level of competition for their particular environment.

2.2 ASSESSMENT OF THE IMPACT OF GROUND HANDLING AS PART OF THE SSP

2.2.1 Globally, ground handling has been identified as an area where safety improvements can be made, and, therefore, should be assessed as part of an SSP. States, through their SSP, should continuously use accident, incident and other relevant safety occurrence data to identify their main areas of concern and assess the effectiveness of actions taken. An example of a ground handling risk assessment can be found in Appendix E.

2.2.2 Annex 13 — *Aircraft Accident and Incident Investigation* puts requirements on States to establish and operate a mandatory incident reporting system to collect information about actual or potential safety hazards. This mandatory accident and incident reporting scheme is a key part of a State's aviation safety system. It is critical that States have both the mechanism and discipline to record occurrences. For aviation safety data to be of most benefit States should have a programme of data analysis to identify issues and trends. In addition, the notification and analysis of lower level incidents is a key way for a State to move from a reactive accident investigation model to a more proactive approach to improving aviation safety.

2.2.3 Also, States are encouraged to implement a voluntary incident reporting system to facilitate the collection of information that could not be captured by the mandatory incident reporting system. States should support incident reporting by creating a non-punitive environment through appropriate adjustments in their legislative and regulatory frameworks.

2.2.4 Safety occurrence reporting aims to improve safety of aircraft operations by timely detection of operational hazards and system deficiencies. It plays an essential role in accident prevention, enabling the identification of appropriate remedial actions by prompt analysis of safety data and by the exchange of safety information. It is important to establish the relationship between the reporting requirements set by State regulators and international organizations.

2.2.5 GHSPs can range from large multinationals to small local companies, both with their own safety cultures and processes handling either commercial scheduled air transport, business aviation or general aviation. The State should tailor its approach to include a balance between oversight and safety promotion with regards to national or local circumstances, the type of GHSP and the services provided. The State may also need to identify the most relevant stakeholders to focus its oversight or safety promotion activities on including GHSPs, air and aerodrome operators.

2.3 MANAGEMENT OF THE GROUND HANDLING IMPACT ON SAFETY

2.3.1 States have various ways to ensure ground handling services are provided safely, such as: safety oversight, including a regulatory framework; data collection and analysis; and safety promotion activities. States may decide that direct certification or licensing is required for the GHSP; however, there are other ways to encourage the uptake of SMS principles through the provision of strong guidance material, as illustrated in this manual.

2.3.2 Safety assurance can be provided directly by the State and/or indirectly through a requirement placed upon the air operators and/or aerodrome operators. In some States, involvement of all three stakeholders in providing safety assurance for ground handling activities has proven to positively enhance safety. Safety oversight could range from simple basic compliance models to complex performance-based systems. Industry best practice, including auditing programmes as referenced in 1.4, can be used as a tool to support the full range of regulatory oversight. In such cases, States should have a process to access industry audit reports.

2.3.3 A State oversight programme alone may not be sufficient to ensure a high safety level by the GHSPs. The air operator, through its own internal audit programme, should provide a high degree of liaison and a strong interface between the two partners as a result of their service contract. Similarly, the aerodrome operator should, through a local licensing agreement, have in place airside safety requirements with which both the GHSP and the air operator will be obliged to comply. At each individual aerodrome, the aerodrome operator should provide an overall safety coordination function bringing together all parties at regular airside safety forums.

2.3.4 The oversight solution for GHSPs chosen by the State should ensure that GHSPs:

- a) use ICAO safety management components (as developed in 4.2);
- b) develop and comply with SOPs (examples shown in 4.3 and Chapter 6); and
- c) conduct initial training and ongoing competency management (as developed in 4.5).

2.3.5 Examples of oversight models, proformas and guidance material adopted by different States are provided in Appendix D.

2.3.6 States should be encouraged to work closely and cooperate with each other to harmonize their approach to the recommendations contained in this manual.

2.4 DETERMINATION OF APPROPRIATE SAFETY PROMOTION ACTIONS

2.4.1 Safety promotion actions to be undertaken by States should be determined according to industry safety maturity. Compliance with Annex 19 requirements on State safety promotion may include the following:

- a) promote the development of just culture within GHSPs;
- b) promote safety culture of the ground handling agents, ensuring they are aware of the main risks related to their activities;
- c) promote the use of hazard analysis and safety risk assessment processes adapted to the GHSP specific activities;
- d) encourage safety occurrence reporting, through simple and harmonized processes;
- e) promote the scalability of safety management principles;
- f) promote the sharing of safety information between operators of each aerodrome through the implementation of national and/or local apron safety committees involving GHSPs;
- g) promote the inclusion of safety provisions and objectives in contractual agreements established between air operators and GHSPs and/or between aerodrome operators and GHSPs;
- h) encourage air operators, aerodrome operators and GHSPs to harmonize safety management principles and procedures;
- i) encourage the use of common safety performance indicators (SPIs) across air operators, aerodrome operators and GHSPs, and sharing of relevant data;

- j) encourage air operators, aerodrome operators and GHSPs to use or accept industry best practice and adopt common sets of harmonized operational procedures; and
- k) encourage and promote the use of new technology for fixed and mobile GSE, aimed to reduce aircraft ground damage and injuries to personnel (standards are referenced in Appendix A, 5).

2.4.2 States may also consider setting up national safety forums and working groups that encourage all stakeholders involved in the provision of ground handling to cooperate and coordinate their activities and share information on safety issues that are of mutual interest. As part of these initiatives, occurrence data reported to the State can be shared with air operators, GHSPs and aerodrome operators. Examples of State initiatives are included in Appendix A, 6.

2.4.3 States should consider encouraging cooperation between the national occupational health and safety agency and civil aviation authority (CAA).

Chapter 3

GUIDANCE FOR AIR OPERATORS

3.1 RELATIONSHIP BETWEEN GHSPS AND AIR OPERATORS

3.1.1 Annex 6 — *Operation of Aircraft*, Part I — *International Commercial Air Transport — Aeroplanes*, states that air operators engaged in commercial air transport shall demonstrate “ground handling and maintenance arrangements consistent with the nature and extent of the operations specified” and that “ground handling arrangements and procedures” shall be contained in the operations manual.

3.1.2 In addition to these general arrangements and procedures, local agreements between the air operator and GHSPs should be established before the commencement of operations. Such agreements should cover:

- a) date of effectiveness;
- b) termination period;
- c) liability and indemnity; and
- d) standard and scope of work.

3.1.3 The agreement should cover the specifics of the services to be provided. If such an agreement involves the use of third parties then those outsourced services should be covered by similarly detailed contractual agreements.

Note.— Information on contract specifics between GHSPs and air operators can be found in IATA’s Airport Handling Manual (AHM), Chapter 8, Ground handling agreements.

3.1.4 Due to the nature and type of operations, differences exist in the handling procedures and selection for commercial air transport, and general and business aviation. Nevertheless, both types of operators should establish basic safety requirements for ground handling activities.

3.1.5 In the case of general and business aviation aircraft, including those operated as per Annex 6, Part I, ground handling services may be requested on short notice without being covered by long-term formal agreements.

3.2 SMS INTERFACES WITH GHSPS

3.2.1 When operational functions are outsourced, the air operator retains responsibility for ensuring safety performance requirements are met. An air operator should have a process for coordination with an external GHSP to ensure the ongoing management of safety risks in operations conducted by the provider for the air operator. The provider’s safety performance should also be considered in the GHSP selection process.

3.2.2 While all GHSPs may not necessarily be required to have an SMS, it is nevertheless the air operator’s responsibility to ensure its own safety performance requirements are met. It is essential for the air operator’s SMS to interact as seamlessly as possible with safety systems of the GHSP that provide products or services pertinent to the

safe operation of aircraft. The organization's SMS and the provider's safety systems should be compatible and complementary through appropriate interfaces.

Safety considerations as part of the GHSP selection process

3.2.3 Safety is an essential part of the selection process when tendering for ground handling services. The following safety items should be evaluated:

- a) organizational management, including;
 - 1) management control and oversight;
 - 2) training, qualification and competency;
 - 3) occupational health and safety;
 - 4) operational procedures and supervision;
 - 5) management and oversight of outsourced functions; and
 - 6) GSE requirements and maintenance programme;
- b) an operational SMS, with particular regards to;
 - 1) accident and incident reporting and investigation;
 - 2) hazard identification and risk mitigation; and
- c) use or implementation of industry best practice for operational procedures and safety management.

Ongoing safety requirements for contracted GHSPs

3.2.4 The air operator's SMS requirements should be included in any contract or service agreement, so that GHSPs understand the air operator's expectations from an operational safety perspective. A key principle is that accountability for safety risk cannot be transferred. The air operator and GHSP need to work closely together to ensure an integrated approach to operational safety.

3.2.5 As part of the SMS interfaces between the air operator and the GHSP, the air operator should ensure that:

- a) there is a clear policy establishing safety accountability and authority flow between the air operator and the external GHSP;
- b) the GHSP has a safety reporting system commensurate with its size and complexity that facilitates the early identification of hazards, risk assessment and mitigation, and safety data is shared between itself and other GHSPs to assist in indicating potential safety issues;
- c) the air operator's safety review board includes GHSP representation, where appropriate;
- d) SPIs are developed to monitor the GHSP, where appropriate;

- e) the air operator's safety promotion process ensures GHSP personnel are provided with the organization's applicable safety communications; and
- f) any GHSP roles, responsibilities and functions relevant to the air operator's emergency response plan (ERP) are developed and tested.

Ongoing safety oversight of GHSPs

3.2.6 Some ways for the air operator to ensure the continued implementation of safety requirements include, but are not limited to:

- a) regular audits and turnaround inspections (these can be based on industry programmes and oversight carried out by aerodrome operators, States or other third parties);
- b) review of relevant reported occurrences and investigations; and
- c) continued oversight by air operator representatives at the station, as applicable.

3.3 PROVISION OF STANDARD OPERATING PROCEDURES

3.3.1 According to Annex 6, Part I, the commercial air operator is required to "develop policies and procedures for third parties that perform work on its behalf". This will typically include procedures, as necessary, for the safe provision of ground handling, including aircraft-type specific requirements and aircraft limitations.

3.3.2 The air operator should develop a turnaround plan that facilitates the coordination of all activities in the turnaround process, taking into consideration aircraft-type specific requirements and limitations. Ideally, the turnaround plan should allow for local variations in the operational environment.

Note.— Turnaround plan, processes and procedures to be provided by air operators are described in Chapter 6, including relevant interfaces.

3.3.3 As a general principle, air operators should consider the adoption of common sets of harmonized operating procedures based on industry best practices (see Appendix A, 3).

3.4 INTERFACES WITH GHSPs IN EMERGENCY RESPONSE PLANNING

3.4.1 The air operator should ensure the GHSP is fully conversant with the ERP and how it interfaces with that of the aerodrome operator and other stakeholders.

3.4.2 The air operator should ensure the ERP of any GHSP it contracts with:

- a) is coordinated with the local ERP processes in effect at the airport as well as any requirement from the air operator ERP;
- b) defines its role and responsibilities, in coordination with all other stakeholders;
- c) establishes direct contact with external entities and service providers that can play key roles in the emergency;

- d) contains the basic requirements necessary for a contingency plan that can be activated in the event of an emergency situation; and
- e) supports the response to the emergency with all relevant stakeholders.

3.4.3 Communication protocols should be established and shared between the air operator, GHSPs, aerodrome operators and other relevant stakeholders to facilitate the initial activation of the response to an emergency, including an up-to-date emergency contact list.

3.4.4 In some States, emergency or crisis response is assumed by a governmental authority rather than by the operator. In such cases, an ERP should focus on and address interaction with and participation in the State response to an emergency or crisis.

3.4.5 It is important that liaison with external stakeholders continues beyond the incident. Maintaining regular lines of communication and attending meetings chaired by these external entities are useful for gaining insight into their areas of expertise.

3.4.6 Where possible, exercises should be carried out with all involved third parties. This will build a network of contacts and provide assurance that the air operator can request assistance when required during an incident.

Note.— Expanded guidance on the coordination of emergency response planning is given in Doc 9859.

3.5 SPECIFIC GUIDANCE FOR GENERAL AND BUSINESS AVIATION OPERATORS

3.5.1 The scope of general and business aviation operations includes commercial air transport, general aviation and helicopter operations, each of which falls under a different part of Annex 6. In general aviation, the responsibility held by the operator in commercial air transport rests either with the aircraft owner or pilot-in-command.

3.5.2 General and business aviation operations occur in an environment with variable operational and business requirements. A single solution for ensuring the safety and regularity of ground handling operations may not always be possible requiring GHSPs to develop procedures to accommodate local differences. For general aviation, this requirement to provide procedures does not exist. The turnaround process for general aviation aircraft is typically simpler and it is more likely the GHSP will have its own set of operating procedures.

3.5.3 Performance-based standards can be facilitated through use of industry “codes of practice”. Such standards and recommended practices should be flexible in nature so that business and general aviation GHSPs can implement the requirements that pertain to their operations and set aside those that are not relevant. For example, the IBAC IS-BAH contains a set of standards and recommended practices that are based on business aviation best practices, designed to be flexible in nature so that business and general aviation GHSPs such as fixed base operators (FBOs) and business aircraft handling agencies (BAHAs) can implement the requirements.

Chapter 4

GUIDANCE FOR GROUND HANDLING SERVICE PROVIDERS

4.1 ORGANIZATIONAL REQUIREMENTS FOR A GHSP

4.1.1 The GHSP should have a documented organizational structure commensurate with the size and complexity of its operations.

4.1.2 The GHSP should have a system for the management and control of documentation and/or data used directly in the conduct or support of ground handling operations, to include:

- a) a means of identifying the current version of operational documents, including SOPs;
- b) a distribution process that ensures availability of the current version of the ground operations manual to appropriate personnel in all areas where ground handling operations are conducted;
- c) review and revision, as necessary, to maintain the currency of information contained in documents;
- d) retention of documents that permits easy reference and accessibility;
- e) identification and disposal of obsolete documents; and
- f) control and dissemination of externally acquired and used documents.

4.1.3 The GHSP should have a designated accountable executive who has ultimate authority over the safe operation of the organization and should be familiar with the laws, regulations and procedures, pertinent to the performance of his or her duties, prescribed for the services being provided. The accountable executive should ensure all personnel are familiar with laws, regulations and procedures as are pertinent to the performance of their respective duties in the operation of the ground handling service.

4.1.4 The GHSP should be staffed by trained and competent management and line personnel to ensure safe and efficient operations. A GHSP should develop job descriptions, duties and responsibilities for each additional functional position dealing with the servicing and handling of aircraft.

4.1.5 A GHSP should establish and maintain an SMS that is commensurate to the size and complexity of the operation.

4.1.6 The GHSP should have an integrated management system that brings together all the systems and processes of the organization into one framework, enabling the organization to work as a single unit with unified objectives. The SMS will form a key part of the integrated management system.

4.2 IMPLEMENTATION OF SAFETY MANAGEMENT PRINCIPLES BY GHSPS

4.2.1 The implementation of safety management principles by a GHSP can be scaled based on a “system description” that is a summary of the organization processes, activities, and internal and external interfaces. The following section describes the 12 SMS elements from Annex 19, which can be implemented by GHSPs, according to the nature of their operations.

4.2.2 If a service is outsourced to a third-party, the GHSP still holds overall responsibility for the safety of services they provide. The safety standards specified in the GHSP’s SMS must not be reduced by any products and services provided by external organizations.

4.2.3 GHSPs may be audited by air operators, aerodrome operators and other regulatory bodies (including the State of the air operator), and should cooperate with them as appropriate. The GHSPs should share with the relevant stakeholders any audit reports and findings that need a joint corrective action.

4.2.4 SMS Element 1.1 — Management commitment

4.2.4.1 The following text is extracted from Annex 19:

“1.1.1 The service provider shall define its safety policy in accordance with international and national requirements. The safety policy shall:

- a) reflect organizational commitment regarding safety, including the promotion of a positive safety culture;
- b) include a clear statement about the provision of the necessary resources for the implementation of the safety policy;
- c) include safety reporting procedures;
- d) clearly indicate which types of behaviours are unacceptable related to the service provider’s aviation activities and include the circumstances under which disciplinary action would not apply;
- e) be signed by the accountable executive of the organization;
- f) be communicated, with visible endorsement, throughout the organization; and
- g) be periodically reviewed to ensure it remains relevant and appropriate to the service provider.

1.1.2 Taking due account of its safety policy, the service provider shall define safety objectives. The safety objectives shall:

- a) form the basis for safety performance monitoring and measurement as required by 3.1.2;
- b) reflect the service provider’s commitment to maintain or continuously improve the overall effectiveness of the SMS;
- c) be communicated throughout the organization; and
- d) be periodically reviewed to ensure they remain relevant and appropriate to the service provider.”