



International Civil Aviation Organization

WORKING PAPER

A41-WP/522

TE/189

12/9/22

(Information paper)

English only

ASSEMBLY — 41ST SESSION

TECHNICAL COMMISSION

Agenda Item 30: Aviation Safety and Air Navigation Policy

30.3 Relevant Outcomes of the High-level Conference on COVID-19, Safety Stream (HLCC 2021)

A NEW APPROACH IN GROUND HANDLING REGULATORY MODELS

(Presented by Saudi Arabia)

EXECUTIVE SUMMARY

In 2016, the General Authority of Civil Aviation (GACA) released a new regulatory framework to address the key risk areas in the provision of ground handling services in Saudi Arabia. This new regulatory model was first presented as an information paper in the 40th ICAO Assembly (A40-WP/456-TE/195). The outcome of its implementation was subsequently presented by Saudi Arabia, on behalf of the Arab Civil Aviation Organization (ACAO) Member States, in the ICAO High-level Conference on Covid-19 (HLCC) in 2021 through working paper HLCC 2021-WP/72-SAF/51.

This paper provides an appraisal of the existing regulatory models in ground handling, in view of the relevant discussion held on the subject during ICAO HLCC 2021, and a follow up of the new regulatory approach implemented in Saudi Arabia.

<i>Strategic Objectives:</i>	This paper relates to the Safety and Air Navigation Capacity and Efficiency Strategic Objectives.
<i>Financial implications:</i>	Without any financial implications
<i>References:</i>	Doc 10160, <i>High-level Conference on COVID-19 (Montréal, 12 to 22 October 2021). Report</i> Doc 10121, <i>Manual on Ground Handling</i> HLCC 2021-WP/72- SAF/51 A40-WP/456-TE/195

1. INTRODUCTION

1.1 Globally, it is estimated that 75 per cent of all ground handling operations are outsourced by airlines to ground service providers, while more air operators turn towards outsourcing ground handling as a means of reducing their overheads and increasing their operational flexibility. It has, therefore, become apparent that there is an essential need for providing uniform and consistent ground services globally to enhance the level of safety, reliability, quality, and efficiency at the world's airports.

1.2 At the HLCC 2021, the regulatory framework for ground handling service providers (GHSP) was extensively discussed. Five out of the six papers submitted expressed the need to address the harmonization, standardization, and oversight of the global GHSP industry. As highlighted during the conference, if no action is taken, ground occurrences resulting from the identified endemic safety issues are estimated to cost the industry USD 8.2 billion by 2030. In regulatory terms, the need for global harmonization translates into a set of uniform standards and practices to be adopted by the global aviation community.

1.3 As transpired from the HLCC 2021, there are currently three regulatory approaches for ground handling: (i) a “voluntary-based, non-prescriptive” approach, (ii) an “accountability-based” oversight, and (iii) a new more “holistic” approach, as implemented by Saudi Arabia.

2. APPRAISAL OF THE EXISTING GROUND HANDLING OPERATING MODELS

2.1 The present ground handling model is governed by a voluntary practice of compliance with the guiding principles of the International Air Transport Association (IATA) Ground Operations Manual (IGOM) and the Airport Handling Manual (AHM). To an extent, these two documents form the operational foundation of the IATA Safety Audits for Ground Operations (ISAGO) program, which sets the framework for GHSP to be audited and certified by IATA on a "wish-to-do" basis.

2.2 However, fourteen years after the launch of the ISAGO program, air operators and GHSP are reluctant to give up their own operating, training, and staff qualification practices. In addition, only an insignificant fraction of the thousands of ground handling stations around the world have solicited ISAGO certification, functioning in a web of disharmonized and sometimes contradicting procedures or rules.

2.3 In this context of a voluntary-based, flexible, and non-prescriptive operating landscape, it is obvious that no prescribed oversight of the GHSP by national aviation authorities could effectively take place. Moreover, in the absence of a regulatory framework, intrinsic human and business psychology may regrettably seek operational and safety compromises when the implementation of certain requirements - not formally prescribed - translate into additional expenditures.

2.4 A different regulatory philosophy comes to partially address some of the risks in ground handling by splitting the responsibility for the oversight of ground services between airport operators and air operators. In this model, airport operators are responsible for ensuring compliance with their own airport bylaws, usually based on a contractual agreement with their GHSP as their tenants. At the same time, air operators are responsible for the supervision of ground handling servicing provided to their own aircraft, remaining accountable for ground servicing quality and safety aspects.

2.5 Based on the above philosophy, GHSP appear to operate within an environment adequately-controlled by their customer airlines and local airport operators. However, this presumption has proven to fall short of expectations, because the oversight exercised by both airports and air operators tends to be superficial, focusing only on elementary parameters. Airports emphasize compliance with their own local airside rules, while airlines pay more attention to visible ramp functions, on-time, and customer service performance indicators.

2.6 What is missing from the above-described approach is the in-depth audit of the safety and quality management systems or the training scheme and operating setting of GHSP in a more holistic manner. It has been empirically realized that inspections performed by airport and air operators can hardly expose the embedded systemic problems in ground handling. These, require methodical drill-down, prescriptive, and systematic approach to reveal the broader picture and uncover the latent hazards and endemic issues.

2.7 To address the drawbacks of the two previously discussed approaches, one could turn towards the well-established and solid regulatory models of airworthiness and flight operations. These two frameworks are founded on a holistic approach and four distinct normative pillars, i.e. (i) the certification of the regulated entity, (ii) the establishment of clear training and licensing requirements for the associated personnel, (iii) the certification of the corresponding training organizations, (iv) and the issuance of detailed guidance material on regulatory requirements and safety oversight.

2.8 In 2016, as discussed in papers A40-WP/456-TE/195 and HLCC 2021-WP/72-SAF/51, a pioneering initiative, consistent with the four normative pillars described above, was undertaken by Saudi Arabia to address the key risk areas in ground handling. GACA released a new regulatory framework, which initially covered the certification of GHSP through GACAR Part 151, and the licensing of their ground staff through GACAR Part 68. Moreover, a 190-page internal E-book (Volume 16) was developed and thereafter updated to address the implementation of the new framework through the definition of internal processes, procedures, and checklists for the exercise of effective oversight of the GHSP industry.

2.9 In 2021, the new regulatory framework was enhanced with detailed ground operations training requirements, supplementing GACAR Part 68 with Appendix-A, incorporating a set of 6 mandatory, 12 job-specific, and 17 ground service equipment (GSE) operators training components. The six mandatory training components defined for all job functions are: (i) regulatory awareness, (ii) safety awareness, (iii) security awareness, (iv) human factors, (v) ERP, and (vi) airport familiarization. In general, training components identify the key training modules, topics, and subtopics, and comprehensively address the following key elements:

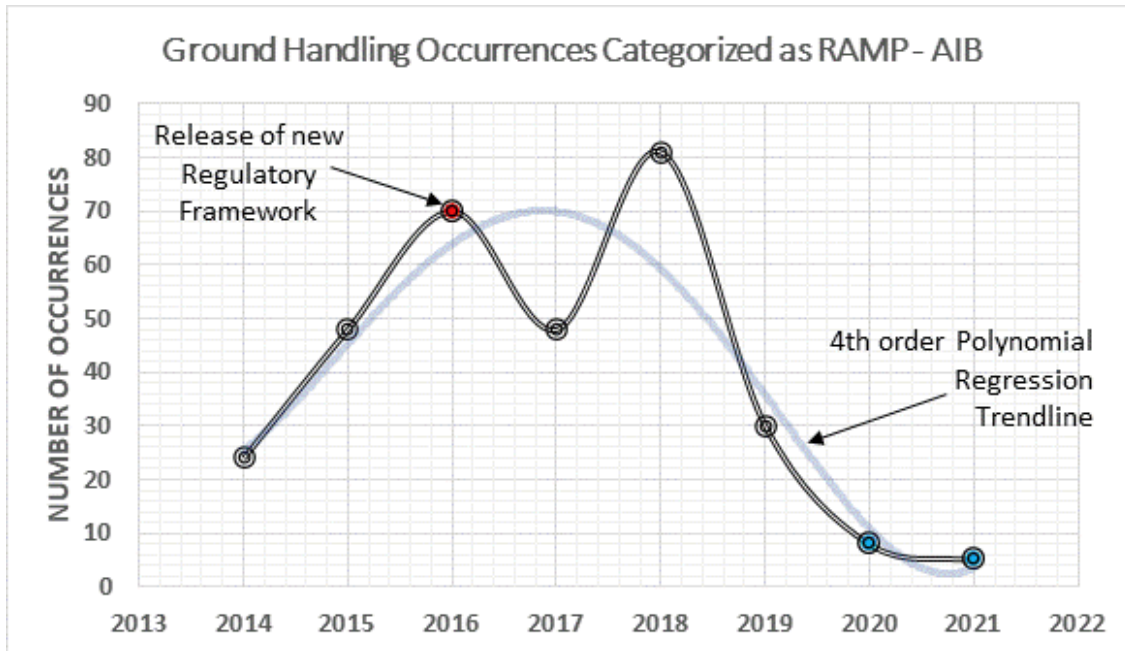
- a) minimum classroom training “units” required for each training component,;
- b) required "duration" and the "conditions" of supervised On-Job-Training (OJT), such as the minimum number of events that must be completed, as well as operating parameters, e.g. narrow/wide body aircraft or day/night time, etc.;
- c) qualification criteria for knowledge exams and OJT assessments; and
- d) training recurrence, describing both the frequency and extent of each training component.

2.10 Moreover, the certification of ground services training organizations is also addressed under the upcoming GACAR Part 146. The main requirements are summarized below:

- a) only certificated ground services training organizations (GSTO) are able to deliver ground services training to staff of regulated entities. The certificate outlines which of the 19 defined training components (the privileges) can be awarded to the applicant organization, and is valid for two years;
- b) two principal documents are submitted for acceptance: (i) the organization exposition, and (ii) the quality assurance/compliance manual;
- c) GSTO are able to partner with certified GHSP to conduct OJT and practical training;
- d) apart from the “accountable executive,” three “post-holders,” acceptable to the aviation authority, are foreseen for the critical management positions of: (i) training, (ii) examinations, and (iii) quality assurance/compliance. The responsibilities of post-holders, instructors, OJT assessors, and audit personnel are outlined, while minimum qualifications for auditors, instructors and assessors are defined; and
- e) detailed requirements are outlined for the: (i) training programme, (ii) training means and (iii) training methods to be employed by the GSTO. Specific conditions are also defined for training and examination facilities, while a set of rules governs knowledge examinations and practical assessments.

2.11 The new holistic framework is applicable to the 28 certified public aerodromes of Saudi Arabia, where 32 different GHSP operate a total of 183 ground stations. To this end, the process has been implemented at the four international airports of Jeddah, Riyadh, Medina, and Dammam, which handle approximately 80 per cent of all flights in the country. From the 60 ground stations operated at these international airports, a total of 44 stations (73 per cent) operated by 25 service providers have been certificated.

2.12 Due to the relatively short time period the new regulatory model has been in effect, as well as the significant reduction of aircraft movements during the Covid-19 pandemic, there is limited data available. The statistical analysis is short of revealing definitive trends, however, based on the 2014-2021 annual reports of the Accident Investigation Bureau (AIB), a 63 per cent reduction in ground handling occurrences is denoted for 2019. This almost matches the levels of 2014 despite an increase of approximately 38 per cent in the corresponding number of flights. The below derived trendline provides preliminary indication of a declining number of serious ground handling occurrences.



3. CONCLUSION

3.1 The benefits of the new holistic regulatory framework are seen as three-fold:

- a) enhancement of ground operations safety at all aerodromes by establishing systematic compliance oversight against prescribed regulatory requirements;
- b) improvement in the quality and level of service provided to passengers and airlines; and
- c) setting a level playing field for new entrants to compete with incumbent GHSP, in view of the opening of the ground handling market and the airport expansion or privatization projects.

3.2 The most positive aspect of the implementation of the new regulatory framework was the intense efforts realized by the GHSP community to amend and improve the way they operate. More specifically, through the certification and systematic auditing of GHSP, tangible progress was recorded in: (i) seeking more experienced and qualified staff, (ii) augmenting personnel training, (iii) streamlining organizational structures, (iv) strengthening quality assurance, (v) enhancing safety management and oversight, (vi) addressing staff shortages and fatigue management, (vii) renewing or upgrading ground service equipment, as well as (viii) improving the reporting of occurrences.

3.3 The Assembly is invited to take note of the information provided in this paper and encourage States to exchange information on the implementation of regulatory frameworks related to the provision of ground handling services.