

## **European Union Aviation Safety Agency**

## **Working Paper**

on the draft EU Ground Handling Regulation

# **Ground Handling Requirements**

RMT.0728

#### **EXECUTIVE SUMMARY**

The objective of this Working Paper is to present the first draft of the future EU rules on ground handling (GH) for consultation with the affected stakeholders. The Working Paper and its annexes are transposing the provisions of Regulation (EU) 2018/1139 establishing requirements for the regulation of the GH domain.

The aim of setting up a regulatory framework for ground handling service providers (GHSP) is to increase the overall safety level of the aviation system, reduce the damages to aircraft and vehicles recorded yearly, and ensure a level-playing field in the EU Member States by establishing a safety baseline for the provision of GH services. An organisation can only prioritise safety risks and manage its resources effectively to obtain optimal results if it has a clear understanding of its role and contribution to aviation safety. In this line, drafting rules to enable GH organisations to develop and maintain a safety culture within the safety management system has been one of the main purposes of the expert group. This has been considered within the larger framework of drafting rules for a management system that can be easily implemented and effectively conducted at individual aerodrome level.

The draft regulation proposes requirements for the organisations of ground handling service providers, their oversight, and the interfaces with air operators and aerodromes where the services are being provided. Those detailed requirements will be based on Annex VII Essential requirements of the Basic Regulation.

The proposed regulation is expected to increase the level of safety in ground operations by enabling effective communication and common interaction between ground handling and the other areas with which it interacts as a perfect interface – air operations and aerodrome operations. The benefits of this proposal are expected to become visible in the safety and level playing field areas.

Regulations (EU) 965/2012 on air operations and (EU) 139/2014 on aerodromes will be amended accordingly in order to ensure the necessary interfaces with the future (EU) GH regulation.

**Domain:** Ground handling, aerodromes and air operations

Related rules: Commission Regulation (EU) No 965/2012 (Air OPS) (and related AMC&GM), Commission

Regulation (EU) No 139/2014 (and related AMC&GM)

Affected stakeholders: Ground handling service providers, aircraft operators and aerodrome operators performing

ground handling, national competent authorities

**Driver:** Efficiency/proportionality **External support:** Expert group

## **EASA rulemaking procedure milestones**

<b>Start</b> Terms of Reference	Focused consultation (draft Opinion and Decision)	Proposal to the Commission EASA Opinion	Adoption by the Commission Implementing/Delegated acts	<b>Decision</b> Certification Specifications, Acceptable Means of Compliance, Guidance Material
22.11.2019	<b>30.06.2022</b> (Webinar)	2023/Q1	YYYY/QX	YYYY/QX
	Advisory Body Consultation			
	23.05.2022			

## **Table of contents**

1. Ab	out this Working Paper	3
1.1.	How this Working Paper was developed	3
1.2.	How to comment on this Working Paper	
1.3.	The next steps	
2. In	summary — why and what	4
2.1.	Background	4
2.2.	The issue	8
2.3.	Objectives of RMT.0728	21
2.4.	Proposed way forward	22
3. Pro	oposed regulation and rationale	29
3.1.	Summary of proposed rules	29
3.2.	Cross-reference list of Air Ops regulation, ADR regulation and GH draft regulation	32
3.3.	Possible amendments to other related (EU) Regulations	
4. Aff	fected Regulations	42

## 1. About this Working Paper

## 1.1. How this Working Paper was developed

The European Union Aviation Safety Agency (EASA) developed this Working Paper in line with Regulation (EU) 2018/1139<sup>1</sup> (the 'Basic Regulation') and the Rulemaking Procedure<sup>2</sup>. This rulemaking task (RMT) 0728 is included in the <u>European Plan for Aviation Safety (EPAS) for 2022–2026</u>.

The consultation phase is run under the Article 6.3 of the Management Board Decision 01-2022, which provides the possibility to choose the most suitable means and tools to achieve the widest possible participation in the consultation. In this sense, the Working Paper containing the annexes with the draft GH regulation will be consulted with the EASA Advisory Bodies (ABs) and also with a wider range of affected stakeholders through a webinar organised on 30 June 2022. The affected stakeholders are ground handling service providers (GHSP), aircraft operators, aerodrome operators, trade unions of workers in the GH domain, and various associations of the organisations mentioned above. EASA has developed the draft rules with the support of a group of experts consisting of stakeholders representing all the types of organisations indicated above. Several technical meetings with the experts took place mostly in Q2-Q4 2021.

## 1.2. How to comment on this Working Paper

Please submit your comments via email to ground-handling@easa.europa.eu.

The deadline for the submission of comments is 30 September 2022.

## 1.3. The next steps

Based on the comments received following the consultation with the Advisory Bodies and the affected stakeholders, EASA will revise the proposed draft rules and will:

- issue an opinion. The opinion will be submitted to the European Commission, which will use it as a technical basis to prepare an EU regulation; and
- issue a decision containing the related acceptable means of compliance (AMC) and guidance material (GM) to support the implementation of the new regulation.

<sup>&</sup>lt;sup>2</sup> EASA is bound to follow a structured rulemaking process as required by Article 115(1) of Regulation (EU) 2018/1139. Such a process has been adopted by the EASA Management Board (MB) and is referred to as the 'Rulemaking Procedure'. See MB Decision No 01-2022 of 2 May 2022, repealing MB Decision 18-2015 on the procedure to be applied by EASA for the issuing of opinions, certification specifications and other detailed specifications, acceptable means of compliance and guidance material (<a href="https://www.easa.europa.eu/the-agency/management-board/decisions/easa-mb-decision-no-01-2022-rulemaking-procedure-repealing-mb">https://www.easa.europa.eu/the-agency/management-board/decisions/easa-mb-decision-no-01-2022-rulemaking-procedure-repealing-mb</a>).



Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (OJ L 212, 22.8.2018, p. 1) (https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1535612134845&uri=CELEX:32018R1139).

Ground handling (GH) as a domain has been self-regulating for many years. Thousands of pages of operational procedures for GH activities were developed and implemented throughout time. Industry has developed standards and operational procedures to ensure safety of commercial and non-commercial ground operations; new 'safety stack' models have arisen, in which safety of ground operations is the main construct to which all users of an aerodrome are equally contributing by sharing safety information and building common operational procedures. Yet, damages to aircraft and vehicles on the ramp worth millions of euros yearly still occur. The rate of occurrences on the ramp, analysed at the beginning of the GH Roadmap initiated by EASA in 2018, revealed a higher-than-average level of injuries and accidents of GH personnel, which cannot be disregarded. The first obvious question that comes to mind would then be, if the domain is so well self-regulated, why is the level of damages and injuries still so high? What is not working properly and what is still missing?

The GH Roadmap initiated by EASA in 2018 tried to find an answer to these questions and determine what needs to be addressed through the future GH regulation. 6 Concept Papers containing the first results and recommendations of this initial assessment were published and discussed in a <u>Ground Handling Conference in March 2019</u>.

The <u>Terms of Reference for RMT.0728</u> were published in November 2019, the content of which was based on the concept papers and the first analysis of the issue.

## 2.1. Background

## 2.1.1. BR prerequisites

Regulation (EU) 2018/1139 (The Basic Regulation) contains provisions on the establishment of new requirements for ground handling. Consequently, EASA was tasked to draft the new rules for the GH domain.

According to the BR definition, ground handling means 'any service provided at aerodromes comprising safety-related activities in the areas of ground supervision, flight dispatch and load control, passenger handling, baggage handling, freight and mail handling, apron handling of aircraft, aircraft services, fuel and oil handling, and loading of catering; including the case where aircraft operators provide those ground handling services to themselves (self-handling)'.

Art. 37 (Organisations): '2. Organisations responsible for the provision of ground handling services and AMS at aerodromes subject to this Regulation shall **declare** their capability, and the availability to them of the means, to discharge the responsibilities associated with the services provided in compliance with the essential requirements referred to in Article 33.'

Art. 62 (Certification, oversight and enforcement): 'That national competent authority shall also be responsible for the oversight and enforcement tasks with respect to organisations responsible for the provision of ground handling services or AMS at that aerodrome.'

## **Annex VII Essential requirements for aerodromes:**

- '2.1 Responsibilities of the aerodrome operator: (...)
- (f) the aerodrome operator shall establish arrangements with other relevant organisations to ensure continuing compliance with the essential requirements for aerodromes set out in this Annex. Those organisations include, but are not limited to, aircraft operators, ANS providers, ground handling service

providers, AMS providers and other organisations whose activities or products may have an effect on aircraft safety; (...)

4. Ground handling services

## 4.1. Responsibilities of the ground handling services provider

The provider of ground handling service is responsible for the safe operation of its activities at the aerodrome. The responsibilities of the provider are as follows:

- the provider shall have all the means necessary to ensure safe provision of service at the aerodrome. Those means shall include, but are not limited to, facilities, personnel, equipment and material;
- (b) the provider shall comply with the procedures contained in the aerodrome manual, including those in relation to movements of its vehicles, equipment and personnel and the risk related to aerodrome operations in winter, at night and in adverse weather conditions;
- (c) the provider shall provide the ground handling services in accordance with the procedures and instructions of the aircraft operator it serves;
- the provider shall ensure that manuals for the operation and maintenance of ground handling (d) equipment are available, applied in practice and cover operation, maintenance and repair instructions, servicing information, troubleshooting and inspection procedures;
- the provider shall use only adequately trained and qualified personnel and shall ensure the (e) implementation and maintenance of training and checking programmes to ensure the continuing competence of all relevant personnel;
- the provider shall ensure that its personnel is physically and mentally fit to execute their (f) functions satisfactorily, taking into account the type of activity and in particular its potential safety and safety-related security impact.

#### 4.2. Management systems

- 4.2.1. As appropriate for the type of activity undertaken and the size of the organisation, the provider shall implement and maintain a management system to ensure compliance with the essential requirements set out in this Annex, manage safety risks and to aim for continuous improvement of this system. Such system shall be coordinated with the management system of the aerodrome operator.
- 4.2.2. The provider shall establish an occurrence reporting system as part of the management system under point 4.2.1 in order to contribute to the aim of continuous improvement of safety. Without prejudice to other reporting obligations, the provider shall transmit all occurrences to the reporting system of the aerodrome operator, the aircraft operator and, if relevant, to that of the air traffic service provider. The occurrence reporting system shall be compliant with the applicable Union law.
- 4.2.3. The provider shall develop a ground handling service manual and operate in accordance with that manual. Such manual shall contain all necessary instructions, information and procedures for the service, the management system and for service personnel to perform their duties.'

The Ground Handling Roadmap started in 2018 with phase 1 - fact finding and an analysis of the current situation at the time. During phase 1, EASA had a series of interviews with associations and social partners. In parallel, EASA sent a survey to affected stakeholders and organised 46 interviews and with individual aerodrome operators, aerodrome associations, GHSP, air operators, and air operator associations to collect information about the strengths and weaknesses of the current situation of ground handling activities. The information EASA wanted to collect was the following:

- whether the Member States had a national GH regulation,
- how extended that national legislation on GH was,
- if there was a safety issue with GH,
- how much the industry was self-regulating by means of industry standards,
- what could be improved in the current situation,
- what should stay as it was.

6 main areas of improvement were identified after those surveys and interviews<sup>3</sup>. EASA and a group of experts then worked on 6 concept papers on those areas of improvement, which were discussed in a workshop with the affected stakeholders in March 2019. The concept papers and the GH Roadmap (published on the <u>EASA website</u>) and the consultation workshop represented **phase 2** of the GH Roadmap.

The GH Roadmap included a list of major safety objectives that were proposed to be considered when developing the further regulatory and non-regulatory actions.

## 2.1.2. Rulemaking activity - Phase 3 of the GH Roadmap

In 2019 and after the workshop, **phase 3** began with the regulatory activity of rulemaking task RMT.0728. The <u>Terms of Reference</u>, stating the issue and objectives, were published on 22 November 2019. In parallel, ICAO published Doc 10121 Manual on Ground Handling in 2019. The content of the manual has been considered in the work done at EASA level.

The 6 areas of improvement identified in the previous phases were discussed and re-organised together with the experts. It was then decided to focus on the following 3 main areas, which have become 3 of the Annexes to the future Ground Handling Regulation:

- 1. Management system of the GHSP (Annex III Organisational requirements), including
  - a. SMS;
  - b. Training of GH personnel; and
  - c. Ground support equipment (GSE) and maintenance programme.
- 2. Authority requirements (Annex II), including
  - a. Management system of the competent authority (to align with the equivalent rules in the other domains and to allow for a smooth integration of the new GH domain within the competent authority); and
  - b. Oversight of GH services. And
- 3. Operational requirements for GH activities, including general lines based on ICAO Doc 10121 (Annex IV).

The experts worked in several subgroups, discussing the following subjects at conceptual level:

Management system including the Safety Management System (SMS), training of GH personnel, standard operating procedures, ground support equipment, staff turnover, and oversight.



© European Union Aviation Safety Agency. All rights reserved. Proprietary document. Copies are not controlled.

- 1. Authority requirements,
- 2. Training for inspectors of competent authorities,
- 3. Management system of GHSP,
- 4. Operational procedures,
- 5. Fostering the development of a safety culture and just culture,
- 6. Training of GH personnel.
- 7. Additional taskforce has been initiated on de-icing and anti-icing requirements. A similar approach is envisaged for fuel requirements and cargo operations until the publication of the Opinion.

From March 2020 until June 2021, RMT.0728 was put on hold due to the more stringent needs generated by the Covid-19 pandemic.

In 2021, work on the ground handling requirements was resumed. Revised deadlines for the deliverables of RMT.0728 were published in the latest editions of <u>EPAS 2021-2025</u> and <u>EPAS 2022-2026</u>.

In line with the current edition of the EPAS, the draft regulation for focused consultation is expected for 2022/Q2, while the Opinion is expected to be delivered to the European Commission in 2023/Q1.

#### 2.1.3. Public consultation on the draft rules

The first draft of the rules will be disseminated to the EASA Advisory Bodies in several stages.

The purpose of these information and discussion sessions is to share with the affected stakeholders the first draft proposal of the future GH rules, to explain the reasoning behind the approach taken, as well as to consult and receive suggestions for improvement of the final draft.

As mentioned also in other places in this document and in the draft rules in the Annexes to this Working Paper, this is a first issue of the draft rules. Stakeholders will be invited to provide comments and suggestions for improvement, bearing in mind that this is not a complete package and that additional AMC and GM will be added to support the implementation of the proposed requirements.

- 1. The first consultation will be with the Member States' groups of experts in the air operations and aerodromes domains (Air OPS TEB and ADR TEB) and with the industry representatives of the air operations, aerodromes and GH domains (ADR.TEC and FS.TEC), and the Member States high-level decision makers at the MAB in April and May 2022.
- 2. The formal written consultation with the EASA Advisory Bodies (all aircraft operators, ATM/ANS, aircraft maintenance and aerodrome communities) is planned to provide a second possibility for stakeholders to provide feedback on the first draft. This phase is planned to start in June, after the MAB meeting.
- 3. A third round of consultation will be done through a dedicated webinar, open to the public, planned for 30 June 2022.

The draft rules, improved after the first round of consultation will be shared once more with the affected stakeholders for last feedback before the publication of the Opinion (planned for Q1 2023).

## 2.2. The issue

## 2.2.1. First analysis of the issue published in the Concept Papers

#### Management system

EU legislation requires aerodrome operators and aircraft operators to develop a management system (SMS elements included). This management system framework requires that the contracted services used by these operators comply with the requirements applicable in the respective domains. While some European Member States have developed robust SMS requirements for GHSPs and an implementation programme, some other Member States have adopted industry standards as soft law or have adopted a mixed approach.

Some GHSPs apply an SMS on a voluntary basis. Aircraft operators, including those providing self-handling, must include the GH activities under their management system as per Commission Regulation (EU) No 965/2012<sup>4</sup>. The audits of competent authorities indicate that many GHSPs have processes in place to manage safety-related issues. The effectiveness and efficiency of the implementation of these SMSs vary substantially.

In many cases, competent authorities do not oversee the management system of the GHSP directly; therefore, there is no assessment of its effectiveness through State oversight. The lack of a defined responsibility for competent authorities to oversee GHSPs makes it difficult to improve the system, even when shortcomings have been observed. In addition, any promotion of a good management system or best practices is hindered by this uncoordinated oversight.

Stakeholders emphasised the lack of an overarching system to regulate the interfaces of management systems between the parties involved in GH activities, SMS-related interfaces included. The oversight requirements are not coordinated between various stakeholders (GHSP's own compliance monitoring function — where it exists, aircraft operators, aerodrome operators). This leads to multiple audits being performed on a single GHSP by all these stakeholders that result in multiple verifications of the same GH processes or tasks and sometimes lead to contradictory corrective actions and unsafe situations. At the same time, other processes may remain outside the auditing scope, as they are not always audited end-to-end, but are limited to the auditor's scope, although GHSPs have to deliver an end-to-end service. Undetected shortcomings could become a serious unobserved safety hazard.

Moreover, there is no requirement to ensure that the results of audits and inspections performed partially by different organisations are commonly shared for all actors involved in GH activities to have the same safety information. For example, the aerodrome operator has control over certain elements with a direct impact on the delivery of GH services (e.g. apron design, driving procedures, vehicle licensing, provision of fixed GSE, real-estate rental, conditions to grant an operating licence to the GHSP, etc.). However, for a number of other services (e.g. operational GH procedures, flight dispatch, performance levels set out in a service level agreement (SLA) between the GHSP and the aircraft operator), the aerodrome operator might not have direct access to the information, especially when audits are done by another organisation such as the aircraft operator, competent authorities, or other industry-based programmes.

Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, (OJ L 296, 25.10.2012, p. 1) (<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1568369634394&uri=celex.32012R0965">https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1568369634394&uri=celex.32012R0965</a>) (See the ORO.GEN.200 series).



© European Union Aviation Safety Agency. All rights reserved. Proprietary document. Copies are not controlled.

Occurrence reporting is mandatory for all actors involved in GH activities through Regulation (EU) 376/2014<sup>5</sup>. However, this regulation mandates only reporting to the competent authorities, not sharing safety relevant information between organisations. The uncoordinated sharing of safety-relevant information between the affected stakeholders results in transmission of data from occurrence reports or best practices being either duplicated or fragmented between the aircraft operator, the GHSP, the aerodrome operator, and the competent authority.

Some contractual clauses (mostly those related to operations such as on-time performance), that have a direct impact on the GHSPs revenues, might generate unintended consequences on safety performance. The safety performance indicators established by an aircraft operator may not be compatible with those that are established by the GHSP for the same task. Aircraft operators are focused on damage to the aircraft and the operational impact of such damage, while GHSPs are focused on the severity of the damage (without operational impact), injuries to persons and damage to GSEs. Several aircraft operators may establish different safety performance indicators for the same GH task delivered by the same GHSP to the turnaround procedures for the same type of aircraft. This could lead to a hazardous situation, especially in the context of high time pressure, which is not evenly addressed today with the current national legislations.

#### **Training**

As required by the Basic Regulation, GHSPs shall 'use only adequately trained and qualified personnel and shall ensure the implementation and maintenance of training and checking programmes to ensure the continuing competence of all relevant personnel'<sup>6</sup>.

ICAO requires that aircraft operators that are engaged in commercial air transport (CAT) demonstrate 'ground handling (...) arrangements consistent with the nature and extent of the operations specified'<sup>7</sup> and that 'ground handling arrangements and procedures' are included in the operations manual. The ICAO standard is transposed to Commission Regulation (EC) No 965/2012 and mandatory for all CAT, NCC and SPO operators<sup>8</sup>. This means that each aircraft operator must develop its own ground handling instructions and procedures. For GHSPs and their personnel, this may lead to different operating requirements for the same tasks. Consequently, there are training elements that are adjusted to the different operating requirements of aircraft operators<sup>9</sup>. GHSPs must comply with the procedures contained in the aerodrome manual or the operations manual of the aircraft operator. When different operator procedures result in repetitive training on the same operational task, this becomes a challenge for GHSPs and is not only costly, time consuming, inefficient, and stressful, but also hazardous, as it creates additional possibilities to make mistakes by applying the wrong procedure. Moreover, national legislations of Member States, as well as different operating procedures established for the same type of equipment by various aerodrome operators may unnecessarily increase the diversity of training elements.

Feedback from stakeholders provided the example of a GHSP serving 15 different aircraft operators on the same aerodrome. This GHSP would have to adjust its training to ensure that staff are familiar with 15 slightly different operator procedures for the same or similar service (e.g. placing of the safety cones).



Regulation (EU) No 376/2014 of the European Parliament and of the Council of 3 April 2014 on the reporting, analysis and follow-up of occurrences in civil aviation, amending Regulation (EU) No 996/2010 of the European Parliament and of the Council and repealing Directive 2003/42/EC of the European Parliament and of the Council and Commission Regulations (EC) No 1321/2007 and (EC) No 1330/2007 (OJ L 122, 24.4.2014, p. 18) (https://eur-lex.europa.eu/legalcontent/EN/TXT/?qid=1568369744001&uri=CELEX:32014R0376).

<sup>&</sup>lt;sup>6</sup> See point (e) of point 4.1 of Annex VII to the Basic Regulation.

Point 4.2.1.3 of ICAO Annex 6 Part I.

<sup>8</sup> See ORO.GEN.205.

Common and properly documented training standards can help to reduce the number of incidents and accidents caused by GH activities. Such training standards should focus on the competencies that are necessary to carry out a specific task. Aircraft and aerodrome operator-specific training elements should then only be an add-on with a focus on operator-specific differences. These should be kept to a minimum and be duly justified by demonstrable safety benefits.

## Oversight

Today, access of GHSPs to perform their services on certain aerodromes is granted differently in each Member State. Some States require a certificate or a licence of the GHSP that can be based on the approval defined in Council Directive 96/67/EC of 15 October 1996; some States accept declarations, and some rely on the acceptance of the GHSP by the aerodrome operator.

Furthermore, there are different methods for overseeing GHSPs in the Member States. Therefore, there is a need to establish a common system to grant GHSPs permission to provide their services on certain aerodromes, as well as a common oversight scheme for GHSPs.

The information available to authorities on GHSPs safety performance originates from the following sources:

- safety and compliance monitoring by aircraft operators as per Commission Regulation (EU) No
   965/2012, themselves subject to oversight by competent authorities;
- aerodrome operators as per Commission Regulation (EU) No 139/2014<sup>10</sup>, themselves subject to oversight by competent authorities;
- direct link between GHSPs and their competent authority;
- industry-based audit programmes; and
- oversight by non-aviation authorities, such as organisations responsible for occupational health and safety.

Where authorities obtain information about GHSPs via audits and assessments of aircraft operators (as per ORO.GEN.205 Contracted activities of Regulation (EU) No 965/2012), it might not capture the whole spectrum of the GHSP activities and safety risks.

Without a regulatory framework for oversight of GHSPs, there is a risk that GH staff training and skills could deteriorate, which could lead to a general degradation of safety in GH, since many occurrences are linked to human factors.

#### Competent authority linked to the aerodrome where the GH activity takes place

The competent authority of the GHSP is the competent authority of the aerodrome at which the GHSP provides its services<sup>11</sup>. This means that a GHSP with activities at several aerodromes that are located in different Member States will have to declare its activities to more than one competent authority and will be under the oversight of one or more competent authorities.

See point 4 of Article 62 of the Basic Regulation: '... The national competent authority of the Member State where the aerodrome is located shall be responsible for those tasks with respect to the aerodrome certificate referred to in Article 34(1) and the certificate for an aerodrome operator referred to in Article 37(1). That national competent authority shall also be responsible for the oversight and enforcement tasks with respect to organisations responsible for the provision of ground handling services or AMS at that aerodrome....'



<sup>&</sup>lt;sup>10</sup> Commission Regulation (EU) No 139/2014 of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 44, 14.2.2014, p. 1) (https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1568371841957&uri=CELEX:32014R0139).

In addition, oversight has to take into account the different types and complexity of the GH activity. Different company structure models also need to be accounted for: some GHSPs with several independent subsidiaries operating at a single airport may or may not use a common management system, while other GHSPs that are owned by a single company might operate based on a common management system, but with slightly different business models for each station.

## **Cooperative oversight**

Specific and systematic cooperative oversight requirements are necessary. These requirements would enable an effective risk-based oversight of GHSPs. At the same time, the intended effect would be to avoid that those GHSPs that are active in several Member States are subject to contradictory or multiple oversight.

## **Operational requirements**

Both ICAO Annex 6 and Commission Regulation (EU) No 965/2012 require aircraft operators to develop policies and procedures for third parties that perform work on their behalf. This typically includes procedures necessary for the safe provision of GH, including aircraft type-specific requirements. These procedures are normally included in a GH agreement between the aircraft operator and the GHSP.

For non-commercial operations (general aviation including corporate aviation operations, as per ICAO terminology<sup>12</sup>), the responsibility rests either with the aircraft operator or with the pilot-in-command. Such operations occur in an environment with variable and more versatile operational and on-demand business requirements, and therefore a single solution for ensuring the safety and timely provision of GH services is not always possible. An agreement for GH services offered to air operator certificate (AOC) holders performing CAT operations may not be equally suitable for general and business aviation operators<sup>13</sup>, which normally request GH services on short notice or even ad-hoc, specific to their business model.

In an attempt to minimise the ground handling safety risks, some organisations have already developed harmonised operational standards and recommended practices. The wider application of these industry standards and practices is expected to improve the aviation safety.

Furthermore, aerodrome operators are responsible for the safe and efficient operation of the aerodrome. For many issues, the aerodrome operator takes a leading role, for example in the emergency response planning, winter operations, low-visibility procedures, etc. For other areas, the aerodrome operator has a coordinating role, e.g. for the activities related to the ground operation of the aircraft, such as stand and gate allocation, provision of ground infrastructure, allocation of space, refuelling, access to the apron, handling of passengers with reduced mobility, etc. Additionally, the ICAO Aerodrome Certification Manual (ICAO Doc 9774) foresees the designation of areas for the storage of inflammable liquids and other hazardous (dangerous) materials, as well as the establishment of methods for the delivery, storage, dispensing, and handling of hazardous materials. This needs to be included in the aerodrome manual. Under the current provisions of Regulation (EU) No 139/2014, (ADR.OR.D.020), aerodrome operators are required to designate appropriate areas for the storage of dangerous goods, however, the regulation does not contain requirements for the establishment of methods for the delivery, storage, dispensing, and handling of dangerous goods at the aerodrome.

<sup>13</sup> Commercial non-scheduled flights operators and non-commercial operators flying with complex aircraft.



© European Union Aviation Safety Agency. All rights reserved. Proprietary document. Copies are not controlled.

See ICAO Annex 6, Operation of aircraft, Part II – International General Aviation – Aeroplanes, Tenth Edition, July 2018.

GHSPs must follow the operational requirements of the aircraft operator and of the aerodrome operator. In doing so, they face challenges arising from the different operational practices required for the same activity and the need to account for local specificities but also to establish a balance between safety and commercial pressure (cost savings, shorter turnarounds, etc.).

The application of different operational requirements for the same task by the GHSP can have detrimental effects by:

- increasing the risk of human error that could lead to aircraft damages and endanger flight safety;
- generating the need for customised training to address the individual requirements of each aircraft operator;
- reducing the effectiveness and impact of safety oversight when GHSPs are getting different audit results by air operators or aerodromes for the same process; and
- increasing training cost and reducing staff availability.

While the responsibility to follow the aircraft operator procedures remains as mandated through the Basic Regulation, the future rules will require GHSP to develop an SMS and assess the risks of its own GH activities and will also establish the grounds for all stakeholders involved in GH operations to communicate and cooperate to share safety-relevant information. This way, it is expected that the cooperation between the aircraft operator and the GHSP to establish a common set of operational procedures with a safety benefit on both sides will increase.

## **Ground support equipment (GSE)**

Servicing of aircraft on the ground involves the use of different types of equipment, motorised and non-motorised, which either operate in close proximity to persons or the aircraft or in direct contact with it. Incident reports involving aircraft damages and staff injuries mention aspects such as:

- poor maintenance of the equipment;
- the use of equipment that is not fit for the purpose;
- the use of equipment that is outside the scope of the tasks it is designed for; and
- non-compliance with the user instructions and specifications for the GSE.

Hence, a programme to ensure proper functioning and maintenance of GSE is important to avoid staff injuries and damage to the aircraft. Such programme should also enable the use of both innovative technologies and technologies with less impact on the environment.

#### Staff turnover

High staff turnover is an issue that has been raised by many stakeholders. There are many reasons for this including, but not limited to, seasonality, benefits, just culture, human factors, business pressure, etc.

Due to this fact, GHSPs are often unable to attract staff for longer periods, leading to a high staff turnover. This leads them to constant hiring and re-training of new and often unexperienced staff, which is costly, creates an additional strain on the more experienced staff, and ultimately has a negative impact on safety.

The COVID-19 pandemic has intensified this problem. The GH domain took the hardest hit from the silencing down lack of travel mostly during 2020, with over 60% of GH personnel either furloughed or let go. Today, GH organisations are having difficulties in replacing missing staff lost during the pandemic with qualified and competent people.



This regulation cannot be extended to directly address the social aspect. However, under Article 89 of the Basic Regulation, the socio-economic factor has an influence on the aviation safety and therefore needs to be considered in the regulatory procedures, oversight and implementation of just culture. EASA has discussed with the GH experts how the social aspect can be indirectly influenced through this regulation, whose focus in on safety. Several leverage points have been identified and inserted in the rules. They refer mainly to the safety culture with its just culture component and the training of GH personnel. It is considered that by supporting GHSP in developing and maintaining a strong safety culture, with a transparent communication and open, non-punitive reporting culture, by ensuring individuals understand their role in ensuring safety and they assume responsibility in everyday operation, along with a solid basis of training to develop their competencies, the rules could create the first steps towards building an improved social status of GH staff.

## 2.2.2. Related safety issues

While the information in this section is not supposed to replace an impact assessment, it provides a few initial elements for a safety analysis, which were already identified in the GH domain and published by EASA in the Annual Safety Reviews<sup>14</sup> in the past years.

The Aerodromes and Ground handling Safety Risk Portfolio was first developed in 2017 by EASA, in conjunction with the Aerodromes and Ground handling Collaborative Analysis Group and has since been reviewed annually.

The key statistics provided below were first published in the <u>EASA Air Safety Review</u> edition 2021. It needs to be clarified, however, that the accidents and serious incidents are those related to aerodrome and ground handling operations in a general context. This means that it cannot be exactly quantified how many of those occurrences were generated only by GHSP to how many of them the aerodrome infrastructure, aerodrome operations also contributed to the reported event. Accidents relating to occupational health and safety, with no element of aviation safety, are not included.

The key statistics for this domain (included in tables 31 and 32 below, reference EASA ASR 2021) include accidents and serious incidents related to aerodrome infrastructure, aerodrome procedures and ground handling operations at aerodromes within the EASA Member States.

 Table 31
 Key statistics for aerodromes and ground handling

2010-2019 TOTAL	TIMESPAN	2020	2020 VS 2010-2019
8	Fatal accidents	0	<b>+</b>
471	Non-fatal accidents	23	ţ
127	Serious incidents	11	<b>+</b>

"There were no fatal accidents related to aerodromes and ground handling in 2020, and the number of non-fatal accidents was less than half of the average of the preceding decade. The number of serious incidents was almost the same as the average of the previous 10 years, which, taking into account the downturn in traffic in 2020, should be considered as being high. The number of serious injuries in 2020 was also in line with the average of 2010-2019."

<sup>&</sup>lt;sup>14</sup> EASA Annual Safety Review 2021: https://www.easa.europa.eu/downloads/130515/en



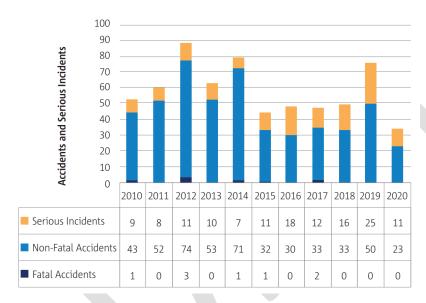
© European Union Aviation Safety Agency. All rights reserved. Proprietary document. Copies are not controlled.

**Table 32** Fatalities and serious injuries for aerodromes and ground handling operations

	FATALITIES	SERIOUS INJURIES
2010-2019 total	18	43
2010-2019 max.	8	6
2010-2019 min.	0	1
2020	0	4

The table below (Fig. 110 in EASA ASR 2021) indicates the number of accidents and serious incidents per year. "There have been no fatal accidents since 2017, and the number of non-fatal accidents in 2020 was lower than any year in the preceding decade. Despite the downturn in traffic in 2020, the number of serious incidents in 2020 was higher than or equal to the number in all years prior to 2016."

**Figure 110** Fatal accidents, non-fatal accidents and serious incidents per year involving aerodromes and ground handling



"In the aerodromes and ground handling domain, EASA has reviewed the accidents and serious incidents for 2016-2020 with regard to risk. All accidents and serious incidents within the scope have been risk assessed using the European Risk Classification Scheme (ERCS) methodology and have been assigned an ERCS score. An explanation of the ERCS and why it is useful is provided in the introduction to this annual review. The numbers of accidents and serious incidents per year, together with the associated ERCS score, is shown in Figure 111. The aggregated ERCS scores by higher risk and lower risk occurrences show a different pattern than the representation of accidents and serious incidents. This is because some occurrences classified as serious incidents have inherent risk profiles that may be equal or even exceed the risk of some accidents."

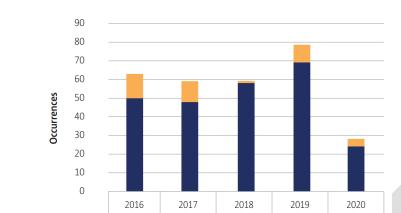
Lower risk (ERCS)

Higher risk (ERCS)

13

50

2. In summary — why and what



11

48

1

58

**Figure 111** Numbers of ERCS higher risk and lower risk occurrences per year involving aerodromes and ground handling

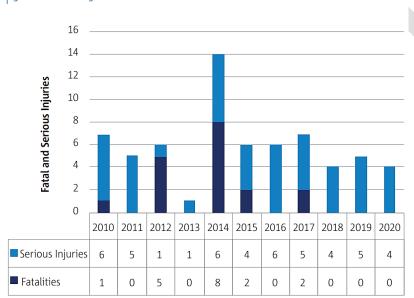
The number of fatalities and serious injuries per year is shown in Figure 112 in EASA ASR 2021. The number of serious injuries has remained between 4 and 6 per year since 2014.

9

69

4

24

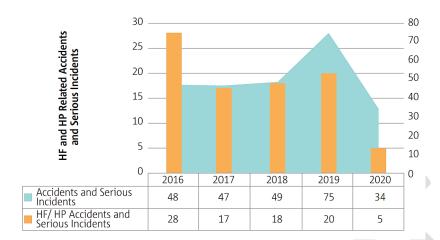


**Figure 112** Fatal and serious injuries per year involving aerodromes and ground handling

## Human factor and human performance

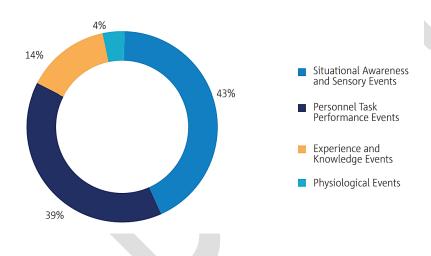
"Over a third of accident and serious incident reports in this domain identify human factors (HF) or human performance (HP) issues. Both HF and HP issues are labelled as 'personnel occurrences' in the ECCAIRS taxonomy. Looking at the figures for the past five years, there is an apparent increase in 2016. The figure for 2020 should be viewed as preliminary and is likely to increase, since HF or HP issues are often not recorded within accident and serious incident reports until the final investigation report has been published.

**Figure 114** Human factors and human performance accidents and serious incidents involving aerodromes and ground handling



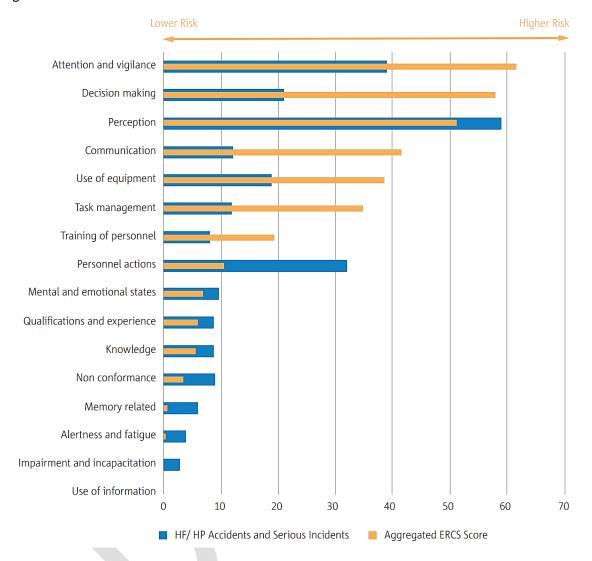
The application of HF or HP codes at a high level can be seen in Figure 115. Situational awareness and sensory events are the most common category of HF or HP issue applied to accidents and serious incidents involving aerodromes and ground handling, followed by personnel task performance. These may be more easily discernible in an investigation than the factors that cause them."

**Figure 115** Human factors and human performance accidents and serious incidents involving aerodromes and ground handling



The next figure (Figure 116 in EASA ASR 2021) "compares the numbers of accidents and serious incidents with the aggregated ERCS risk score of those occurrences, using detailed HF and HP event codes. Some events carry a greater risk than others, as indicated where the aggregated risk score is far higher than the number of accidents and serious incidents."

Figure 116



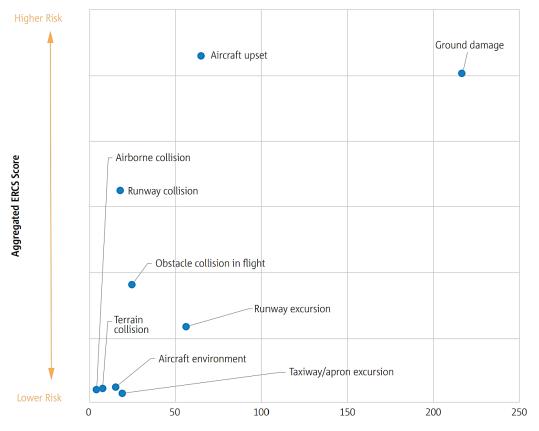
Safety risks for aerodromes and ground handling (EASA ASR 2021)

"The safety risks for aerodromes and ground handling are derived from accident and serious incident data from the EASA occurrence repository and the European Central Repository, covering the 5-year period 2016-2020 (363 occurrences).

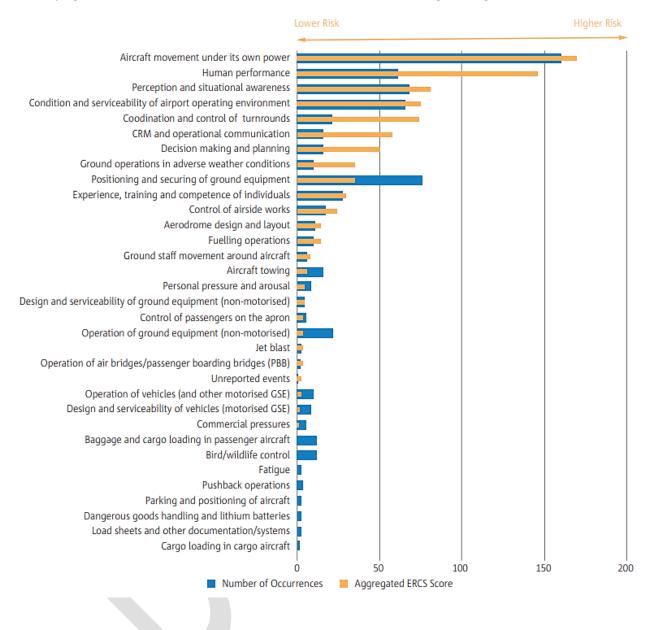
The main key risk areas for this domain are highlighted in Figure 117 and are defined by their potential accident outcome and by the immediate precursors of that accident outcome. Note that one single occurrence can be associated with more than one key risk area.

The most frequent key risk area for aerodrome and ground handling related accidents and serious incidents is ground damage, followed by aircraft upset and runway excursions. In terms of aggregated risk, ground damage and aircraft upset are on a similarly high level of aggregated risk, followed by runway collision."

**Figure 117** Key risk areas by aggregated ERCS score and number of risk-scored occurrences involving aerodromes and ground handling



"Figure 118 shows a comparison between the number of occurrences per safety issue and their aggregated ERCS score. A yellow bar in the graph that is considerably longer in comparison with the underlying blue bar indicates a low number of occurrences contributing to a high risk."



## Key risk areas in the safety risk portfolio

"The key risk areas are listed at the top of the table and are prioritised from left to right based on the aggregated ERCS-risk score. The safety issues are listed on the left of the table and are also sorted from the top by decreasing aggregated ERCS risk score. The different colour bands denote high to low risk of the safety issues."

Table 33 Data portfolio for aerodromes and ground handling

SAFETY ISSUE	AIRCRAFT UPSET	GROUND DAMAGE	RUNWAY COLLISION	OBSTACLE COLLISION IN FLIGHT	RUNWAY EXCURSION	FIRE, SMOKE AND PRESSURISATION	TERRAIN COLLISION	AIRBORNE COLLISION	TAXIWAY/APRON EXCURSION
Aircraft movement under its own power	0	х	Х	0	х				х
Human performance	o	o	o		О				
Perception and situational awareness	o	О	O		О				
Condition and serviceability of airport operating environment	Х	Х	O	Х	х	О	О		х
Coordination and control of turnarounds	. x	Х		0	o	О			
CRM and operational communication									
Decision making and planning									
Ground operations in adverse weather conditions									
Positioning and securing of ground equipment									
Experience, training and competence of individuals									

x = stronger contributor to the key risk area o = weaker contributor to the key risk area.





## Safety recommendations

The following SR addressed to EASA from aircraft accident investigation report(s) published by the designated safety investigation authority<sup>15</sup> is considered for this RMT. New SRs related to this RMT may be added during the development of this RMT.

## SE 03/2018 GERF 2018-002, investigation report BFU AX001-15SR

The text of the safety recommendation states: 'The European Aviation Safety Agency (EASA) should continue and expand the current activities regarding aircraft de-icing. In addition, due to the importance of aircraft de-icing for flight safety, EASA should consider placing aircraft de-icing under regulatory authority similar to aircraft maintenance.'

The accident involved a Fokker F28 Mk0200 registration HB-JVE, and the event occurred at Nuremberg, on 20 January 2015, during pre-departure.

Cause of accident: ingestion of de-icing fluid into the APU which caused the disintegration of the APU during de-icing.

Currently, Regulation (EU) No 965/2012 on air operations covers aircraft ground de-icing/anti-icing through, amongst others, the following provisions which are addressed to the air operators (IR, AMC and GM):

- ORO.GEN.200 'Management system' (The operator's risk assessment, mitigation (e.g. procedures
  in the Operations Manual), personnel training and compliance monitoring)
- ORO.GEN.205 'Contracted activities' (The operator shall ensure compliance with the applicable rules by their service providers)
- AMC3 ORO.MLR.100 Manuals general 'Contents CAT operations' (e.g. 8.2.4 under OM-A)
- CAT.OP.MPA.250 and GM1 to GM3 'Ice and other contaminants ground procedures'.

RMT.0728 will extend the analysis of the current rules to determine how they should be further improved or expanded to address this risk and prevent similar occurrences in the future.

## 2.3. Objectives of RMT.0728

The overall objectives of the EASA system are defined in Article 1 of the Basic Regulation. This Working Paper will contribute to achieving the overall objectives by addressing the issues described in Section 2.1.

The specific objectives of this proposal are to:

- support GHSP to develop and maintain a safety culture;
- build confidence in the capacity of GHSPs to mitigate the safety risks in GH operations effectively;
- develop a framework for effective interfaces between the parties involved in GH operations, including the exchange of safety-relevant information;
- improve and harmonise the training level of GH personnel;

Regulation (EU) No 996/2010 of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation and repealing Directive 94/56/EC (OJ L 295, 12.11.2010, p. 35) (<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1479716039678&uri=CELEX:32010R0996">https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1479716039678&uri=CELEX:32010R0996</a>).



© European Union Aviation Safety Agency. All rights reserved. Proprietary document. Copies are not controlled.

 develop a framework for oversight of GHSPs and their operations, with special focus on cooperative oversight.

While the drivers for any action in this context remain the increase of safety and assuring a level playing field, the efficiency gains would no doubt be advantageous. In a risk-based oversight environment, measurable safety improvements are automatically followed by a reduction of oversight pressure. An increase of trust in the other organisations' management system would bring efficiency gains that will benefit all organisations involved in GH activities.

Moreover, extending the concept of an integrated management system to the GH sector aims at enhancing the confidence in GHSP as equal partners in the aviation safety chain.

At the same time, putting the GH operations on the European safety map helps to give proper recognition to the importance of the GH domain in the broader safety picture in aviation.

## 2.4. Proposed way forward

The Basic Regulation requires the development of provisions to cover the following elements of the GHSP in order to perform safe operations at the aerodrome:

- 1. Facilities, personnel, equipment and material
- 2. GHSP's management system, including management of safety risks and continuous improvement of the management system
- 3. Occurrence reporting system; in addition to other reporting obligations, transmission of all occurrences to the reporting system of the aerodrome operator, the aircraft operator and, if relevant, the ATS provider
- 4. GH service manual with all necessary instructions, information and procedures for the service, the management system and service personnel to perform their duties
- 5. Compliance with aerodrome procedures, esp. in relation to movements of its vehicles, equipment and personnel and the risks related to aerodrome operation in winter, at night and in adverse weather conditions
- 6. Provision of services in accordance with the procedures and instructions of the aircraft operator it serves
- 7. Manuals for operation and maintenance of its ground support equipment (GSE)
- 8. Adequately trained and qualified personnel and maintenance of training and checking programmes to ensure competence of all relevant personnel
- 9. Physically and mentally fit personnel to execute their functions satisfactorily, taking into account the type of activity

## 2.4.1. Who is affected?

The affected stakeholders are:

 Ground handling service providers (GHSP) providing services at aerodromes that are covered by the BR. This sector of aviation, although having a safety-relevant function, is not regulated at EU level or even at international level (ICAO). National legislation in the sector varies considerably. Some Member States apply a legislation that relies on the main industry standards, while others have developed and apply a set of requirements created by their



national experts. Industry has developed standards and associated programmes, both for commercial operators and non-commercial operators. The standards address the management and operation of GH services and standard operational procedures. As per Art. 37 BR, the GHSP will have to declare their activities. As per the Essential requirements for aerodromes (Annex VII), the new regulation will have to include provisions for the management system of GHSP, adequate training for the GH personnel and their continued competence, a GH manual with instructions and procedures for the services provided, instructions for the operation of ground support equipment (GSE) and a maintenance programme for it.

- 2. Competent authorities. The competent authorities apply a national system of oversight. In some Member States, this oversight is not done directly by the competent authorities, but through aerodrome operators. Aircraft operators are also responsible that the safety hazards inherent to the contracted services are considered within their management system. This regulation will include provisions for competent authorities that will standardise the oversight and the safety of the GH services provided to operators at EU aerodromes. Competent authorities will have to train their inspectors to perform oversight to GHSP, develop adequate procedures, have an oversight planning cycle, and ensure that all the declarations from GHSP are correctly and timely reflected in the future Repository of information (per BR Art. 74).
- 3. Aircraft operators. As per BR Annex VII Essential Requirements for aerodromes (pt. 4.1.(c)), the services provided will have to be performed in accordance with the aircraft operators' procedures and instructions. Not all aircraft operators are required to develop such procedures. This is the case mainly of NCO operators (non-commercial operations with other-than complex motor-powered aircraft), which are not even required to have an operations manual or ground handling procedures for that matter. Although the ultimate responsibility for the aircraft safety remains with the aircraft operator, the responsibilities for the safety of the GH service provided will have to be clearly defined and allocated to the right stakeholder.
- 4. Aircraft operators performing ground handling to themselves ('self-handling' in the BR). Those services will also be covered by the new GH regulation. All the elements described above for GHSP will have to be applied in the case of self-handling with a few exceptions that are indicated directly in the rules. The rules are drafted in such a way as to allow aircraft operators to integrate the ground handling elements into their management system, to avoid duplications and unnecessary administrative and organisational burden.
- 5. Aerodrome operators. As per BR Annex VII Essential Requirements for aerodromes (pt. 4.1.(b), the GHSP will have to comply with the procedures contained in the aerodrome manual, including those related to movements of its vehicles, equipment and personnel, as well as the risk related to aerodrome operations in winter, at night and in adverse weather conditions and training on specific activities (e.g. FOD, driving of vehicles, etc.). The future GH requirements will be aligned with the aerodrome requirements, and clear lines of responsibilities will be drawn in this area as well. Also in this case, the GH requirements will ensure an interface between the GHSP and the aerodrome operator, to avoid duplications and confusions as to who is responsible for what.

## 2.4.2. Incipient impact assessment

A full impact assessment will be published within the Opinion. This is a first assessment of the issues, based on the results of the surveys and discussions with stakeholders in 2018 when the GH Roadmap was initiated, as well as during the COVID-19 pandemic and the return to normal operation phase. It is also based on the first safety data analysed and discussed with the stakeholders in the EASA

Collaborative Analysis Group on ground handling and aerodrome matters; partial results were published in the last years' issues of the EASA Annual Safety Reviews.

Establishing requirements for GHSP is a prerequisite stemming from the Basic Regulation, so the traditional option 0 – 'Do nothing' of the impact assessment procedure is not applicable to this RMT. It is only kept as a basis for comparison, however, it is not further assessed.

Option 1 proposes to address the provisions for GHSP included in the Basic Regulation as detailed in Section 2.1.1 BR prerequisites. This includes developing requirements for:

- 1. A management system of GHSP, including SMS and processes for occurrence reporting, risk management and continuous improvement of the system,
- 2. Training for GH personnel and ensuring their continued competence,
- 3. A maintenance programme for the ground support equipment,
- 4. The declaration system,
- 5. A GH service manual to include all instructions and procedures for the provision of GH services,
- 6. Oversight by competent authorities.

The topics above are not very suitable for proposing various options in which the future GH rules could be developed. Considering that the GH regulation should be aligned as much as possible with the other 2 existing regulations with which it has significant interfaces (Air OPS and ADR), almost all the topics need to be addressed in a more or less pre-established format and content, in order to allow an easy integration of new elements into existing structures (organisations like air operators or aerodrome operators, already having an approved management system, should not duplicate the same structures, but should only integrate the new GH elements into the existing systems).

The only possible variation – to enable a comparison of several options in which the rules could be developed – could be applied to the development of operational requirements. Consequently, 2 options were identified for the development of the operational requirements.

## Option 1

Option 1 would be to develop a fully-fledged set of operational procedures for each GH service.

With Option 1, the rules would include, besides the high-level safety objective, details about how the objective should be met.

If detailed operational procedures are included in the implementing rule (IR), standardisation of procedures would be fully ensured. However, the lack of flexibility would render those standards very slow to update and modernise to keep pace with industry updates, some of which produce new issues every year. It would also show insufficient resilience to numerous and constant changes. The EASA standards will already be obsolete by the time they become applicable. This situation must be avoided.

If the detailed operational procedures were included at AMC level, while the high-level safety objectives are put in the IR, standardisation of procedures would be ensured to a high extent. It would allow the use of industry standards as alternative means of compliance. However, even in this case the speed with which the industry is improving its operational procedures, adopts new techniques and tools to provide GH services would still be too high for the pace with which the AMC would have to change.

This option, while ensuring harmonisation, would lack proportionality and could not realistically address all the different needs of different types of operators and cover all operational contexts with multiple variables of operation.

Option 1 would create parallel standards to the existing standard operational procedures (SOP) developed by the industry, which are backed up by an impressive amount of expertise and experience. The operational procedures are subject to continuous improvement, as they should incorporate lessons learned from safety occurrences for each organisation, and the EASA AMC&GM could obviously not keep pace with the same rhythm of changes. These SOP are already applied today by a significant number of GHSP, aircraft operators and aerodrome operators. The safety benefit in creating another set of standards, imposed through the rules, which would become obsolete before they became applicable would be too small compared to the development and implementation costs. This approach would be counterproductive and could not ensure sufficient resilience and flexibility of the rules.

The GH experts discussed at length this option and a first draft of operational requirements developed in this direction was considered to be too detailed and too rigid.

The conclusion after applying this option was that for the operational requirements EASA needs to adopt a performance-based approach. The rules should express only the high-level safety objective in order to allow maximum flexibility to improve, adapt, change. No details should be added, as they would only become too old too soon.

As option 1 was considered to be too prescriptive and inadequate for the needs of the industry, it has been discarded.

## Option 2

Considering the feedback from option 1, option 2 would be to develop high-level safety objectives for the operational requirements, to enable the necessary flexibility for the industry to develop the procedures or apply the existing industry SOP. Option 2 would also include references or content from the ICAO Doc 10121 on GH. This option is performance-based, which means that it does not ensure harmonisation. It allows organisations to quickly change, improve by incorporating lessons learned from safety events, adapt the SOPs to their needs, the operational context and the new technologies.

The draft rules contain several elements to enable the stakeholders involved in GH activities (air operators, GHSP, aerodrome operators, AMS providers) to share safety information and, based on that, to develop a common set of SOP applicable to all users of that aerodrome when such a business model is feasible on that aerodrome. This would ensure a harmonisation of procedures.

With option 2, the responsibility for the development of an operational procedure and for the correct application of a procedure would remain unambiguous; BR requires air operators to have procedures for the servicing of their aircraft and GHSP to apply them as per the air operator's instructions. The responsibilities would apply accordingly. However, BR requires that also GHSP develop their own procedures; this is applicable in case the aircraft operators do not have any operational procedures for the GH servicing of their aircraft (mainly the case of NCO operators) or when those procedures do not reach the GHSP (mainly the case of non-commercial operators performing private flights, or business flights for the interest of their own organisation, when those air operators use certain aerodromes occasionally or on an infrequent basis).

Moreover, the new rules incorporate significant parts of ICAO DOC 10121 GH Manual which identify those operations that require the development of interfaces. For those operations, with the aid of the new rules and the already existing rules for aerodrome operations and aircraft operations, sharing of tasks while keeping the responsibilities clear should become easier and clearer.

It is considered that option 2 would address the industry needs better than option 1 and therefore the operational requirements have been drafted in this direction.

The brief impact assessment described below is based on option 2. A full impact assessment will be developed and published in the Opinion.

## Safety impact

The analysis of the ERCS occurrences reveal the following top fifteen causes of occurrences related to aerodrome operations and ground handling:

- 1. Aircraft movement under its own power
- 2. Positioning and securing of GSE
- 3. Perception and situational awareness
- 4. Human performance
- 5. Experience, training and competence of individuals
- 6. Operation of ground equipment (non-motorised)
- 7. Aircraft towing
- 8. Baggage and cargo loading on passenger aircraft
- 9. Operation of vehicles (and other motorised GSE)
- 10. Coordination and control of turnarounds
- 11. Fuelling operations
- 12. Ground operations in adverse weather conditions
- 13. Personal pressure
- 14. Design and serviceability of vehicles (motorised GSE)
- 15. Pushback operations

The categories under number 1, 4, 3, 10, 12 and 11 in the list above have an associated high risk, calculated by the algorithms established through the European Risk Classification Scheme (ERSC) (see Section 2.2.2).

The future GH regulation is expected to increase safety in the provision of GH services by ensuring that GHSP can manage this risk through an effective management system with a strong SMS component on the one hand and, on the other hand, by establishing a training programme to aim at developing competent personnel who understand their role in the safety assurance and who perform at the required standards. At the same time, the increase of safety is expected to be strengthened also by a clear determination of the responsibilities and interfaces created between GHSP, aircraft operators and aerodrome operators. New rules are proposed to enhance transparent and consistent communication of safety-relevant data between these stakeholders. The rules will enable the development of common safety procedures to be used at an aerodrome, when this operational model is feasible (e.g. the Luton Safety stack model, which is now being developed also at aerodromes within the EU).

The requirements on oversight, with a particular focus on cooperative oversight of multi-national GHSP operating in more than one Member State, are also envisaged to contribute to the safety of GH operations. By applying a regular oversight using standardised methods based on common EU

requirements, constant exchange of experience, and a standardised training programme for inspectors based on the development of competencies, competent authorities will have a significant role in the increase of GH safety.

## Environmental impact

The future GH regulation is expected to have a negligible impact in the environment. The rules are drafted in a technology-neutral approach. This should enable the use of vehicles developed based on new technologies with reduced emissions. When possible, rules will be drafted to allow and even encourage the recycling of fluids used for de-icing and anti-icing.

## Economic impact

GHSP: Those GHSP that already apply existing industry standards and procedures are not expected to be heavily impacted by the new regulation, as they should already have developed the most significant structures required under the new GH regulation – i.e. a management system with the SMS component, a GSE maintenance plan, operational procedures, training for GH personnel. Those GHSP that do not have these structures implemented within their organisations will be more strongly impacted by the new GH regulation.

Aircraft operators: The impact of the new GH regulation on aircraft operators that already have GH procedures is expected to be negligible. In the longer run, it may be expected that the costs for the outsourced GH services be raised due to cost-recovery reasons of GHSP.

Self-handling aircraft operators: Negligible economic impact is expected for those aircraft operators that are performing self-handling using existing industry standards for the same reason explained above under GHSP.

Aerodrome operators performing GH services: Negligible economic impact is expected for those aerodrome operators that are performing self-handling using existing industry standards for the same reason explained above under GHSP.

Competent authorities: A raise of costs in the initial implementation of the GH regulation is expected. The development of a system to monitor the declarations of GHSP, the drafting of the oversight planning cycle, developing standardised checklists, possibly changes to the current procedures or development of new procedures on the new requirements, training of inspectors – all these elements will require additional resources from competent authorities.

## Social impact

A positive social impact on GHSP and their personnel is expected through the GH regulation. The new rules, sustaining the development and maintenance of a safety culture within the GH organisation, will enhance the awareness of their individual role within the big picture of aviation safety. The competency-based training should also improve their knowledge, skills, and attitude to perform their tasks in a competent manner. The social status of GH staff is expected to be elevated through this new regulation. These aspects, together with the general recognition of the GHSP as a domain with responsibility and accountability established through a self-standing regulation, will bring equal recognition of GHSP as a partner to the assurance of safety in aviation.

## **Proportionality**

It is considered that with the implementation of option 2, GHSP and air operators will have enough flexibility to develop operational requirements adapted to their type of operation and respectively services provided.

As far as the general organisational requirements are concerned, the rules are drafted so that the management system and the SMS in particular can be applied effectively at each station (i.e. aerodrome) where the GH services are provided. At the same time, large organisations would be able to develop a more complex structure for their management system to be applied in a uniform manner to all their stations.

In the same line with a station-centric approach, the oversight activities would focus on the effective implementation of the organisations' management system and the SMS at each individual station. When multi-national GHSP are the subject of oversight, then the cooperative oversight component becomes relevant, and the rules provide several indications on how cooperative oversight should be developed.

It is considered that the draft proposal addresses well the principle of proportionality.

## 2.4.3. ICAO references relevant to this RMT

Today there are no specific standards and recommended practices in the ICAO Annexes dedicated to GH services and providers of these services.

At the end of 2019, ICAO published Doc 10121 Manual on Ground Handling containing good practice material, to support stakeholders and GHSP in improving the safety and create interfaces with air operators and aerodrome operators.

With the first task of creating the GH Manual completed, the ICAO GH Taskforce (GHTF) is continuing with its second task to develop detailed proposals to amend Annex 14, Volume I – Aerodrome design and operations, and to a smaller extent Annexes 6 Parts I, II and III - Aircraft Operations, Annex 8 – Airworthiness and Annex 9 - Facilitation. A separate chapter on ground handling is being developed for PANS-Aerodromes (Doc 9981) to support and elaborate on the SARPs provisions.

The ICAO High-Level Conference on COVID (HLCC) of 2021 concluded that the work on the SARPs in the GH domain should aim to "develop a flexible and balanced approach for the oversight of ground handling, taking into account views from and impact on different stakeholders."

It is not yet agreed whether GHSP will be specifically mentioned as a service provider in Annex 19 and required to develop an SMS in the future. The discussion during the HLCC highlighted the fact that although ground handling remains a critical sector of the industry, careful consideration is needed prior to the development and entry into force of further regulation for the domain. The proposed solution was to encourage States to regularly assess the impact of GH operations on aviation safety, thereby building a picture of the safety performance of GH in each State, thus enabling them to identify and mitigate trends that may lead to safety concerns. With this proposal, States will have to include the new domain in their State Safety Programme to establish an oversight model for the GH activities and possibly additional oversight functions.

## 3. Proposed regulation and rationale

The proposed rules are added in the Annexes to this Working Paper. Most of the implementing rules are drafted. Some AMC and GM have also be drafted, but more will be added before the Opinion publication.

## 3.1. Summary of proposed rules

In short, below are some of the main ideas and principles on which the draft EU GH regulation has been conceived.

On authority requirements:

The rules are aligned to the maximum amount possible with the existing regulations on air operations and aerodromes. This is to enable an easy integration of the new domain into the existing structures of a competent authority. The rules provide flexibility for the way in which competent authorities decide to integrate the new area — either as an independent unit or included within the aerodrome operators unit or the air operators unit. The relevant aspect is that the inspectors assigned for the oversight of GH activities need to be competent to perform their tasks. The guidance for the development of a competency-based training and assessment programme (CBTA) will be developed separately from the rule framework, in a manual, following the model already under development or already applicable in some Member States and in other areas (e.g. dangerous goods and the CBTA programme developed by the DGELG).

The decision to apply a CBTA in this domain is based on the lessons learned from other domains on the one hand and on the scientific advancement in the domain of adult learning. CBTA is adopted and implemented on an increasingly wider scale in all aviation domains, be it for industry employees or for competent authorities. It is the preferred way because, among others, it has a pragmatic approach, aims at developing competencies in persons which prepare them for new tasks they never did before, builds not only their knowledge but also skills and attitudes, and focuses on a realistic learning environment. On the other hand, lessons learned in other aviation domains indicate a rather low level of training and competence of competent authority inspectors. The difficulty to find competent inspectors to perform oversight in the GH domain has also been confirmed by the industry experts who support EASA in the rule development. For these reasons, the competent authority experts in the group decided that a CBTA approach would be the most appropriate for this purpose.

Another very important aspect on which the work of the expert group focused is the development of a basis for cooperative oversight. This is most relevant in the GH domain, perhaps more obvious than in the air operations or aerodrome domains, as the Basic Regulation does not apply the principle of a principal place of business for GHSP, but rather links them to the aerodrome where they provide services. This makes the oversight more complex in terms of cooperation between competent authorities. Multi-national GHSP provide services in many Member States and even outside the EASA States. This implies a strong cooperative oversight, including in the case of some EU Member States where there are more competent authorities assigned per domain. In cases when a competent authority gives a finding related to the GHSP's management system at one aerodrome in their State, they need to search for more information and communicate with other competent authorities where that GHPS operates to identify whether that finding could be a systemic issue linked to the management system in general or just an operational issue that is specific only to the aerodrome subject to oversight. This is only one example where cooperative oversight proves to be indispensable.

EASA intends to provide support for the building of a strong community of competent authority inspectors to implement an efficient, open and transparent cooperative oversight. An inspector training component is also foreseen to strengthen this cooperation, in that competent authorities should strive to ensure continued competence of their inspectors by ensuring the recurrent training system includes exchanges of experience with inspectors of other competent authorities.

## Connection with the European Council Directive 96/67/EC

The GHSP has been drafted so as to enable, where applicable, compliance with the European Council Directive 96/67/EC transposed in the national legislation of each Member State. That Directive grants a GHSP the authorisation to provide services at certain EU aerodromes. The Council Directive 96/67/EC is of economic nature and regulates market access; it is not related to safety. However, the new EU GH regulation needs to establish a connection with the Directive and ensure that the GHSP, before submitting a declaration, has obtained the authorisation to provide services at the aerodromes specified in its declaration if they are subject to the Directive. From a pragmatical point of view, the declaration should be the last step in the preparation process of a GHSP to start providing services at an aerodrome that is subject to Directive 96/67/EC. As far as self-handling organisations are concerned, those are usually authorised to provide services at aerodromes unless there is a lack of space. If there are some constraints with regard to the available space or capacity at an airport which do not permit self-handling, this is established via an exemption (Art. 9 of the Directive). Otherwise, organisations performing self-handling do not need an authorisation to provide self-handling in the conditions specified in the Directive.

## Organisation requirements

Safety culture: The rules intend to put focus on the development by GHSP of an SMS with a strong safety culture component. This includes a just culture and a non-punitive safety reporting culture. This is again based on facts that show a low reporting culture in the GH domain. With low or inadequate reporting, the causes of incidents and accidents cannot be well established and the reasons why such events occur cannot be properly understood; this hinders the adoption of adequate mitigations and the risk assessment can be erroneous. New rules are proposed to encourage organisations to implement and maintain a safety culture, to build a healthy safety reporting culture following the just culture principles. More AMC and GM will be developed to support the implementation of those rules.

At the same time, the new proposed rules aim at strengthening the communication and sharing of safety-relevant data and information between the air operators, GHSP and aerodrome operators. Some amendments are envisaged for Regulations (EU) 965/2012 and 139/2014 in this sense, to align and create the necessary hooks to enable this communication. In the new GH regulation, this is proposed under the safety reporting system and safety programmes (a rule that already exists in the Aerodrome regulation). Moreover, the expert group consider that the operational model applied through the Luton Safety Stack is a very good example of cooperation between all users of an aerodrome, with an astounding increase in safety of operations at that aerodrome, and that the future GH rules should enable the implementation of such a model at other aerodromes where this is feasible. Creating the basis of an open communication and sharing of safety-relevant information is also supposed to increase mutual trust, which is expected in the long term to reduce the amount of inspections and audits to a GHSP performed by many different organisations (air operators and aerodrome operator).

On the general approach towards the management system requirements: it is intended to create a set of rules that are easy to implement by small organisations operating at a single station (aerodrome), but which enable large organisational structures to develop a more complex management system.

The rules are also drafted to allow a smooth incorporation of the GH new elements into the existing management systems of organisations already required to have one under other regulations – aircraft operators, aerodrome operators. This is the concept of 'integrated management system'.

On the declaration system: the rules had to be developed considering the Basic Regulation constraints which link the GHSP organisation to the aerodrome where they provide services, without indicating any relevance for the principal place of business of the GHSP. This means that a GHSP operating in more than one Member State has to submit a declaration to as many competent authorities as there are for the aerodromes where they provide services. With a station-centric approach promoted through the new proposed GH rules, this should be the task of each single GHSP unit at each aerodrome where that organisation provides services; this means one declaration per responsible person of that GHSP at an aerodrome, one time, instead of having the GHSP headquarter submit 20-30 different declarations to as many competent authorities (more than 27 declarations considering the maximum amount that includes Germany, which has more than one competent authority in the aerodrome domain). When, however, the business model of a GHSP requires that the management system of the whole organisation is centralised in a single point, which then submits all declarations from a single point, this is also possible with the draft rules. The proposed form of the declaration has been conceived to simplify the task of filling in the declaration by each GH station.

On proportionality and level-playing field: certain GH services have been taken out of this regulation as they are considered to be sufficiently covered by other regulations. Such services are:

- Ground supervision and representation when performed by an aircraft operator as self-handling.
- Load control activities related to mass and balance calculation, load planning and production of related load-control documents when performed by both aircraft operators as self-handling or by GHSP (regardless of the place where they provide these services).
- Flight dispatch.

These activities are specific to aircraft operator's operational control and can be monitored and managed in the most pragmatic way under their own management system. When load control and flight dispatch services are outsourced, these are managed under the requirements related to contracted activities.

The activities related to oil supply (included in the definition of GH services in the Basic Regulation) are already covered by Regulation (EU) 1321/2014 as a typical maintenance task.

On contracted activities: a new rule is proposed to cover the contracted activities of a GHSP. However, this covers those organisations that are not subject to a declaration regime or other approval regime. The GH regulation will apply also to GHSP that provide services to another GHSP. This should cover cases when a GHSP cannot be made responsible for the quality or safety of a service or product delivered by another GHSP when the first GHSP has no alternative to contract that service or product from another provider. For example, a GHSP that contracts a de-/anti-icing company (which is also a GHSP under the new GH regulation) should not be made fully responsible for the safety of the de-icing service (fluid, personnel competence, vehicle, procedure) if that de-/anti-icing service provider is the only one available at that aerodrome.

On the same topic, the Air Ops rules on contracted services will need to be amended to allow the proper allocation of responsibilities for those organisations that declare their capability to discharge the GH services and have their own management system. This is however, not going to shift the responsibility for the safety of the aircraft from the aircraft operator to somebody else.

On the GH personnel training: this is considered to be one of the most important aspects that the future GH regulation will need to improve. The draft rules have not been fully developed on this topic. While the general implementing rule is included in this first draft to address the Basic Regulation provisions (ensure adequate training and continued competence of personnel), the expert group aims at developing more AMC&GM to support the implementation of a training and assessment programme to ensure that persons are competent to perform the tasks as per the established standards. At the same time, it is proposed to provide guidelines for the implementation of a CBTA for the safetyrelevant GH functions at GM level, while also allowing the possibility for organisations to implement other training systems to comply with the objective in the implementing rules. This part will be developed further.

Further explanations (rationale) on the draft rules are provided directly in the annexes to this document, below each rule.

## 3.2. Cross-reference list of Air Ops regulation, ADR regulation and GH draft regulation

The following table provides a cross-reference list between the three regulations, to indicate the correspondence where it exists between the three interfacing domains.

Reg. (EU) 965/2012 on air operations	Reg. (EU) 139/2014 on aerodromes	Draft Reg. (EU) on ground handling			
ARx – AUTHORITY REQUIREMENTS					
ARO.GEN.005 Scope ADR.AR.A.001 Scope ARGH.GEN.005 Scope					
	ADR.AR.A.005 Competent authority	ARGH.GEN.100 Competent Authority			
ARO.GEN.115 Oversight documentation	ADR.AR.A.010 Oversight documentation	ARGH.GEN.115 Oversight documentation			
ARO.GEN.120 Means of compliance	ADR.AR.A.015 Means of compliance	ARGH.GEN.120 Means of compliance			
ARO.GEN.125 Information to the Agency	ADR.AR.A.025 Information to the Agency	ARGH.GEN.125 Information to the Agency			
ARO.GEN.135 Immediate reaction to a safety problem	ADR.AR.A.030 Immediate reaction to a safety problem	ARGH.GEN.135 Immediate reaction to a safety problem			
-	ADR.AR.A.040 Safety directives	-			
ARO.GEN.200 Management system	ADR.AR.B.005 Management system	ARGH.MGMT.200 Management system			
ARO.GEN.205 Allocation of tasks to qualified entities	ADR.AR.B.010 Allocation of tasks to qualified entities	ARGH.MGMT.205 Allocation of tasks to qualified entities			
ARO.GEN.210 Changes in the management system	ADR.AR.B.015 Changes to the management system	ARGH.MGMT.210 Changes to the management system			
ARO.GEN.220 Record-keeping	ADR.AR.B.020 Record keeping	ARGH.MGMT.220 Record keeping			
ARO.GEN.300 Oversight	ADR.AR.C.005 Oversight	ARGH.OVS.300 Oversight			
ARO.GEN.305 Oversight programme	ADR.AR.C.010 Oversight programme	ARGH.OVS.305 Oversight programme			
ARO.GEN.310 Initial certification procedure – organisations	ADR.AR.C.015 Initiation of certification process				
	ADR.AR.C.020 Certification basis				
	ADR.AR.C.025 Special conditions				
	ADR.AR.C.035 Issuance of certificates				
ARO.GEN.330 Changes - organisations	ADR.AR.C.040 Changes	See below 320			
ARO.GEN.345 Declaration - organisations	ADR.AR.C.050 Declarations of AMS providers	ARGH.OVS.310 Declarations of GHSP			
-	-	ARGH.OVS.315 Proof of applicable authorisations			
See above 330	See above 040	ARGH.OVS.320 Changes to the declaration			
ARO.GEN.350 Findings and corrective actions - organisations	ADR.AR.C.055 Findings, observations, corrective	ARGH.OVS.330 Findings, observations, corrective			
	actions and enforcement measures	actions and enforcement measures			
ARO.GEN.355 Findings and enforcement measures- persons	-	-			
ARO.GEN.360 Findings and enforcement measures – all operators	-	-			
-	-	ARGH.OVS.340 Cooperative oversight			
		ARGH.XXX.400 Additional procedures for a harmonised oversight			

ORx – ORGANISATION REQUIREMENTS					
ADR.OR.A.005 Scope	ORGH.GEN.005 Scope				
ADR.OR.A.010 Competent Authority	ORGH.GEN.105 Competent Authority				
ADR.OR.C.005 Aerodrome operator responsibilities ADR.OR.F.001 Responsibilities of the AMS provider	ORGH.GEN.110 Responsibilities of the GHSP				
ADR.OR.B.015 Application for a certificate	ORGH.GEN.115 Start of the provision of GH services				
ADR.OR.A.015 Means of compliance	ORGH.GEN.120 Means of compliance				
certificate holder	-				
aerodrome operators	-				
ADR.OR.B.040 Changes	ORGH.GEN.130 Management of changes				
ADR.OR.B.035 Continued validity of a certificate	-				
ADR.OR.C.015 Access ADR.OR.F.030 Access	ORGH.GEN.140 Access				
ADR.OR.C.020 Findings and corrective actions ADR.OR.F.035 idem	ORGH.GEN.150 Findings and corrective actions				
ADR.OR.C.025 Immediate reaction to a safety problem – compliance with safety directives ADR.OR.F.040 idem	ORGH.GEN.155 Immediate reaction to a safety problem				
ADR.OR.C.030 Occurrence reporting	ORGH.GEN.160 Occurrence reporting				
ADR.OR.C.040 Prevention of fire	-				
ADR.OR.C.045 Use of alcohol, psychoactive substances and medicines ADR.OR.F.075 idem	ORGH.GEN.165 Use of alcohol, psychoactive substances and medicines				
	ADR.OR.A.005 Scope  ADR.OR.A.010 Competent Authority  ADR.OR.C.005 Aerodrome operator responsibilities ADR.OR.F.001 Responsibilities of the AMS provider  ADR.OR.B.015 Application for a certificate  ADR.OR.B.030 Terms of compliance  ADR.OR.B.030 Terms of the certificate and privileges of the certificate holder  ADR.OR.B.005 Certification obligations of aerodromes and aerodrome operators  ADR.OR.B.025 Demonstration of compliance  ADR.OR.B.040 Changes  ADR.OR.F.025 Changes  ADR.OR.C.015 Access  ADR.OR.C.015 Access  ADR.OR.C.020 Findings and corrective actions  ADR.OR.C.020 Findings and corrective actions  ADR.OR.C.025 Immediate reaction to a safety problem – compliance with safety directives  ADR.OR.C.030 Occurrence reporting  ADR.OR.C.030 Occurrence reporting  ADR.OR.C.040 Prevention of fire  ADR.OR.C.045 Use of alcohol, psychoactive substances and medicines				

ADR.OR.D.005 Management system ADR.OR.F.045 idem	ORGH.MGMT.200 Management system
Similar ADR.OR.D.005A	ORGH.MGMT.200A Information security management system
ADR.OR.D.010 Contracted activities	ORGH.MGMT.205 Contracted activities
ADR.OR.D.015 Personnel requirements ADR.OR.F.065 idem	ORGH.MGMT.210 Personnel
ADR.OR.D.017 Training and proficiency check programmes	Separate subpart TRG
ADR.OR.D.020 Facilities requirements	ORGH.MGMT.215 Facilities
See below ADR.OR.D.035 ADR.OR.F.080	See below ORGH.DOC.105
ADR.OR.D.025 Coordination with other organisations	ORGH.MGMT.220 Interfaces with other organisations
ADR.OR.D.027 Safety programmes ADR.OR.F.060 idem	ORGH.MGMT.225 Safety programmes
ADR.OR.D.030 Safety reporting system ADR.OR.F.055 idem	ORGH.MGMT.230 Safety reporting system
AMC1 ADR.OR.D.005(b)(10) Coordination of the aerodrome emergency response plan	ORGH.MGMT.240 Emergency response plan
-	ORGH.MGMT.245 Software equipment
ADR.OR.D.035 Record keeping ADR.OR.F.080 idem	See below ORGH.DOC.105
ADR.OR.F.085 Formal arrangement between the organisation responsible for the provision of AMS and the aerodrome operator	-
ADR.OR.F.005 Declaration of the organisation responsible for the provision of AMS	ORGH.DEC.100 Declaration
ADR.OR.F.010 Continued validity of the declaration [AMSP]	ORGH.DEC.105 Continued validity of a declaration
	ADR.OR.F.045 idem  Similar ADR.OR.D.005A  ADR.OR.D.010 Contracted activities  ADR.OR.D.015 Personnel requirements ADR.OR.F.065 idem  ADR.OR.D.017 Training and proficiency check programmes  ADR.OR.D.020 Facilities requirements  See below ADR.OR.D.035  ADR.OR.D.035  ADR.OR.F.080  ADR.OR.D.025 Coordination with other organisations  ADR.OR.D.027 Safety programmes ADR.OR.F.060 idem  ADR.OR.D.030 Safety reporting system ADR.OR.F.055 idem  AMC1 ADR.OR.D.005(b)(10) Coordination of the aerodrome emergency response plan  -  ADR.OR.D.035 Record keeping ADR.OR.F.080 idem  ADR.OR.F.085 Formal arrangement between the organisation responsible for the provision of AMS and the aerodrome operator  ADR.OR.F.005 Declaration of the organisation responsible for the provision of AMS

-	ADR.OR.F.015 Start of the provision of AMS	-
-	ADR.OR.F.020 Termination of the provision of AMS	ORGH.DEC.110 Termination of the provision of GH services
	ADR.OR.E.010 Documentation requirements ADR.OR.F.100 idem	ORGH.DOC.100 Documents and records
ORO.MLR.100 Operations manual - general	ADR.OR.E.005 Aerodrome manual ADR.OR.F.095 Management system manual [of AMS]	ORGH.DOC. <b>110</b> GHS Manual
ORO.MLR.115 Record-keeping	See above ADR.OR.D.035 Record keeping ADR.OR.F.080 idem	ORGH.DOC. <b>105</b> Record keeping
Subparts ORO.FC, ORO.CC, ORO.TC	See above ADR.OR.D.017	ORGH.TRG.100 Training and competence programmes
		Subpart GSE ORGH.GSE.100 GSE – general
		ORGH.GSE.105 GSE maintenance programme

## 3.3. Possible amendments to other related (EU) Regulations

Additionally, it is expected that Regulations (EU) 965/2012 on air operations and (EU) 139/2014 on aerodromes need to be amended in line with the new proposals in the GH regulation. The purpose of the changes is to create a solid regulatory framework to encourage building of an effective interface and sharing of relevant safety information between the three main actors involved in ground handling: GHSP, air operators and aerodrome operators.

Although this draft regulatory proposal does not include the proposed amendments to Regulations (EU) 965/2012 and 139/2014, the following sections and areas have already been identified for potential changes:

This is a list of topics and rules that may have to be amended as per the proposed rules in the GH regulation. The list is subject to further changes.

The proposed amendments to the other regulations will be published in the Opinion.

Topic	Reg. (EU) XX on GH	R.(EU) 965/2012 on AIR OPS	R.(EU) 139/2014 on ADR
Definitions: 'safety-sensitive personnel'		To include GH personnel. Additionally, Reg. (EU) 923/2011 (SERA)	-
Ground supervision and station representation activities when performed by self-handling air operators; Flight dispatch; and Load control Mass and balance, load planning and production of related documents	Article 1 Subject matter and scope: These activities are not covered by GH Reg.	ARO.GEN.005 and ORO.GEN.105.  To ensure these activities are covered	-
Emergency response plan	ORGH.MGMT.240	Ensure the rules establish links to GHSP. air operator shall ensure that a copy of their ERP is sent to the GHSP, to enable arrangement of proper support from the GHSP.  Emergency response planning of ADR and air operator should include the GHSP.  AMC1 ORO.GEN.200(a)(1); (2);(3);(5);	Ensure the rules establish links to GHSP. The aerodrome operator shall ensure that a copy of their ERP is sent to the GHSP, to enable arrangement of proper support from the GHSP. Emergency response planning of ADR and air operator should include the GHSP. ADR.OR.D.005 and related AMC&GM

Topic	Reg. (EU) XX on GH	R.(EU) 965/2012 on AIR OPS	R.(EU) 139/2014 on ADR
		AMC1 ORO.GEN.200(a)(3)	
Aerodrome emergency alerting system			AMC1 ADR.OPS.B.010(a)(2): Failure of the ADR emergency alerting system - this is a reportable event in GM1 ORGH.GEN.160 as per Reg. (EU) 2015/1018 (Annex IV Section 1), but in the AMC to the ADR reg. the GHSP is not included in the alerting system
Standard operational procedures / operational requirements	1. nil.  2. GH.OPS.005: GHSP shall cooperate with the aircraft operator to develop common operational procedures to increase safety, reduce operator variations as much as possible.	1. Development of operational procedures (SOP) by NCC operators - only specified in AMC2 ORO.MLR.100 (OPS Manual), but additional requirements may be needed. 2. The aircraft operator shall cooperate with the GHSP to develop common operational procedures to ensure safety of operation and reduce operator variations as much as possible.	
Aircraft ground movement (marshalling, stand allocation, a/c departure from stand)	Only reference to R. 139/2014 is required		taxi-in, marshalling and taxi-out are regulated by R. 139/2014 under ADR.OPS.D.015, 025, 030, 035, 040.
De-icing, anti-icing			ADR operator to have a programme for recovery of glycol from the deicing/anti-icing fluids for environmental protection purposes

Topic	Reg. (EU) XX on GH	R.(EU) 965/2012 on AIR OPS	R.(EU) 139/2014 on ADR
Pushback and towing	GH.OPS.00 series	CAT.OP.MPA.205 removed and included into the GH regulation	
Overlapping responsibilities for the oversight of GHSP by NCA and the aerodrome operator			To clarify: AMC1 ADR.AR.C.010 point (b)(26) states: "(b) Inspections, audits, and oversight procedures, on a scale and frequency appropriate to the operation, should include but not be limited, as appropriate, to the items from the following list: () (26) operator's oversight of the compliance of the organisations operating, or providing services at the aerodrome (third parties)"
Reporting (safety reporting system)	ORGH.MGMT.230 point (c)(4): GHSP shall in cooperation with the aircraft operator or the aerodrome operator, or both, () analyse and assess the reports in order to address safety deficiencies and identify trends ()	This should be mirrored in both ADR and OPS regulations. There is no similar rule in R.965/2012	This should be mirrored in both ADR and OPS regulations. Possibly in ADR.OR.D.030
Psychoactive substances	ORGH.GEN.165 must be aligned with the other 2	CAT.GEN.MPA.170 must be aligned with the other 2	ADR.OR.C.045 must be aligned with the other 2

Topic	Reg. (EU) XX on GH	R.(EU) 965/2012 on AIR OPS	R.(EU) 139/2014 on ADR
Interfaces with other organisations	1. ORGH.MGMT.220 Link this with the aerodrome collaborative decision-making (A-CDM) process. However, this term is not yet defined in ADR reg, except for the training part (see AMC1 ADR.OPS.D.085(a)(2) (i)).	1. No similar rule.  Link this with the aerodrome collaborative decision-making (A-CDM) process.	1. ADR.OR.D.025 Coordination with other organisations (more generic, includes all organisations from an aerodrome). Link this with the aerodrome collaborative decisionmaking (A-CDM) process. However, this term is not yet defined in ADR Reg., except for the
	2. GH.OPS.010 Include in the other 2 regulations that the GH activities involving more than 1 stakeholder should identify the responsibilities of the other actors	2. Identify the proper rule where to insert this link.	training part (see AMC1 ADR.OPS.D.085(a)(2)(i)).  2. Identify the proper rule where to insert this link.
Contracted activities	involved.	ORO.GEN.205 Change the rule to enable declared organisations to assume responsibility for the activities/services provided, which are covered under their declaration and management system.	ADR.OR.D.010 Ensure that the rule enables declared organisations to assume responsibility for the activities/services provided, which are covered under their declaration and management system.
Training and procedures			ADR.OPS.B.028 Aircraft towing - aligned with GH Reg.
Training on dangerous goods	ORGH.TRG.100		Add requirements on DG (EPAS): ADR operators to train their personnel in the handling of dangerous goods if the ADR operator is acting as a subcontractor (handling agent) of air operators. Or simply refer to the GH rules on DG training.

Additionally, other Regulations may also need to be amended to address or include ground handling activities or organisations providing GH services:

# (a) Reg. (EU) 2015/1018 Reportable events, ANNEX IV Occurrences related to aerodromes and ground services

- 2. Ground handling of an aircraft
  - (...)
- 2.1. Aircraft- and aerodrome-related occurrences
  - (...)
  - 8. "Fire, smoke, explosions in aerodrome facilities, vicinities and equipment which has or could have endangered the aircraft, its occupants or any other person."

(...)

Point 8: By using the term 'aerodrome facilities', it seems that the GHSPs own facilities and equipment are excluded.

- 2.3. Ground handling specific occurrences
  - (...)
  - (7) Significant spillage [of fuel]

Point (7): 'significant' should be defined.

## (b) Regulation (EU) No 1321/2014 on aircraft continuing airworthiness

The definition of ground handling services in the Basic Regulation includes 'oil supply'. The GH experts confirmed that this activity is always performed by maintenance personnel and never by GHSP. Therefore, it should be ensured that this task is included in Regulation (EU) 1321/2014.

## 4. Affected Regulations

The following Regulations may need to be amended and aligned with the new requirements for ground handling:

- Commission Regulation (EU) No 139/2014 of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council.
- Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council.
- Commission Implementing Regulation (EU) 2015/1018 of 29 June 2015 laying down a list classifying occurrences in civil aviation to be mandatorily reported according to Regulation (EU) No 376/2014 of the European Parliament and of the Council.
- Any other Regulation that will be affected by the future GH regulation will be identified and the list of affected regulations.