

Unofficial translation, in case of any discrepancies between the English version and the original Swedish version the latter will prevail.

Guidelines for the Swedish Gambling Authority's regulations and general advice on technical requirements and accreditation of bodies for inspection, testing and certification of gambling service providers (LIFS 2018:8), and for Chapters 1 and 4 of the Swedish Gambling Authority's regulations and general advice on state lotteries and lotteries for matters of public interest (LIFS 2018:4).

Update 20191212

Chapter 4 Section 18 has been corrected due to a mistake in translation.

Update 20210222

Chapter 13 Section 2 has the general advise added information about x^2 testing.

The Swedish Gambling Authority's regulations and general advice on technical requirements and accreditation of bodies for inspection, testing and certification of gambling service providers;

The new gambling regulations mean that anyone applying for a licence to provide gambling must obtain a certificate from an accredited body to attest that the equipment etc. that the applicant intends to use meets the prescribed requirements. Players must be able to assume that the games on offer are secure, and that they cannot be manipulated.

The assessment must be carried out by a body accredited for this purpose in accordance with Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93. In Sweden, the accredited body is the Swedish Board for Accreditation and Conformity Assessment (Swedac).

Anyone applying for a licence to provide gambling must fulfil the requirements set out in these regulations. In addition to the regulations, the applicant must also meet the requirements set out in the Gambling Act (2018:1138), the Gambling Ordinance (2018:1475) and other regulations of the Swedish Gambling Authority. The applicant's technical equipment must be assessed before it can be used in the gambling operation.

These guidelines aim to clarify the regulations and provide help for those intending to apply for a licence to provide gambling and those applying for accreditation to for inspect, test and certify gambling service providers.

Chapter 1 Scope

Section 1 These regulations and general advice apply to applicants for accreditation to inspect, test and certify gambling service providers, applicants for a licence to conduct gambling services and license holders in accordance with Gambling Act (2018:1138).

The Swedish Gambling Authority can grant exemptions from the regulations, if doing so is motivated from a safety perspective and does not otherwise entail any risk to the player.

The regulations and general advice do not apply to

1. land-based casinos in specific premises in accordance with Chapter 5, Section 1 of the Gambling Act,
2. token gambling machines in accordance with Chapter 5, Sections 7–8 of the Gambling Act,
3. local pool game in accordance with Chapter 6, Section 8 of the Gambling Act,
4. games covered by municipal registration in accordance with Chapter 6, Section 9 of the Gambling Act,
5. land-based casino games, goods gambling machines and card tournaments in accordance with Chapter 9, Section 1 of the Gambling Act,
6. games on-board vessels in international traffic in accordance with Chapter 10, Section 1 of the Gambling Act,
Lotteries in accordance with Chapter 6, Section 1 of the Gambling Act with a turnover of less than

SEK five (5) million are only subject to Chapter 13.

The regulations do not apply to land-based casinos, such as Casino Cosmopol and restaurant casinos, to token gambling machines at Casino Cosmopol and at restaurants, or to goods gambling machines, card tournaments that are not played online, local pool game in the form of local pool game, lotteries of the type that may only be organised in a municipality and which are to be registered in that municipality, or to cash and token gambling machines and restaurant casinos.

Lotteries for matters of public interest with a turnover of less than SEK five million are only subject to the regulations on random number generators.

Expressions used in the regulations and general advice

Section 2 Unless otherwise stated, the terminology used in the regulations has the same meaning as in the Gambling Act (2018:1138) and the Gambling Ordinance (2018:1475).

In these regulations and general advice, the following definitions are used

1. *checksum*: figures appended to numbers or messages to allow discovery of changes and faults. Checksums are calculated using a specific mathematical procedure;
2. *information asset*: information, and any resources handling that information, which is of value to an organisation. A gambling and ERP¹ system consists of one or more information assets that the licence holder defines in a list;
3. *encryption*: encoding of data and information using an encryption algorithm that is generally known and published;
4. *live casino game*: casino game offered online via video link, data-transferred communication service or similar, in which drawing equipment is used instead of a gambling system;
5. *maximum load*: defined by the certified licence holder. The term refers to the point where the gambling system will automatically reject bets from players;
6. *politically exposed person (PEP)*: a person who holds, or has held, a prominent public function in a country or in the management of an international organisation;
7. *agent terminal*: technical equipment used to handle different types of games and player information, which cannot be managed by the player, which is part of the gambling system and which does not function when disconnected from the rest of the gambling system;
8. *round*: a series of events from the time the licence holder opens a game and the player places a bet until the result of the game has been generated;
9. *login session*: the period from the time the player logs in to the gambling system until the player chooses to log out or is logged out by the system;
10. *random number generator*: an algorithm or physical device intended to generate a sequence of events (often numbers) with certain statistical properties in common with number sequences, which appear randomly following a given distribution of probabilities;
11. *UTC*: Coordinated Universal Time. UTC Sweden is available at the BIPM in Paris. It is guaranteed to be retrieved securely by the Research Institutes of Sweden (RISE) in Borås – Sweden’s research and innovation partner for business and society – and is referred to as UTC(SP); and
12. *pot*: all or parts of the players’ bets in accordance with the rules of the game in question, where the licence holder retains these bets until they are distributed in full or in part; the pot may consist of a jackpot, pool betting and distributed jackpots.

Chapter 2 Inspection, testing and certification

Those providing gambling services must ensure that gambling systems, ERP systems, etc., meet the requirements set out in regulations issued pursuant to Chapter 16, Section 1 of the Gambling Act

¹ Enterprise Resource Planning

(2018:1138). In accordance with Chapter 16, Section 3 of the same act, the equipment's compliance with Swedish regulations for gambling activities must be assessed by a body accredited for this task. Pursuant to Chapter 18, Section 4 of the Gambling Act, the Swedish Gambling Authority is entitled to access areas, facilities, premises, etc., where gambling is conducted or where gambling equipment is handled or stored. The aim of this access is to allow the Swedish Gambling Authority to carry out supervisory measures.

Chapter 16, Section 2 of the Gambling Act stipulates that as a main rule, the licence holder's gambling system must be located in Sweden. The Swedish Gambling Authority can grant exemptions under certain conditions. However, the licence holder is obligated to apply for such an exemption. If the licence holder has applied for an exemption, the accredited body's assessment must include whether it is possible to carry out inspection of the gambling system through remote access or similar.

Section 1 Those applying for a gambling licence must contact an accredited body for inspection, testing and certification of gambling systems, ERP system, procedures, lot-drawing equipment and physical lottery tickets in accordance with Chapter 16, Section 3 of the Gambling Act (2018:1138).

Provisions on accreditation in accordance with the first paragraph, which is carried out by Swedac, can be found in the Accreditation and Conformity Assessment Act (2011:791).

General advice:

If the applicant, or the party providing services on behalf of the applicant, is certified in accordance with the applicable standard ISO/IEC 27001:2014, the requirements set out in Chapter 4–6 of these regulations may already be fulfilled.

A valid ISO/IEC 27001:2014 certificate, statement of applicability and documented risk assessment must be made available for the accredited body to evaluate.

Swedac is the national accreditation body for Sweden. Swedac monitors compliance with quality and security requirements in order to facilitate free movement of goods and services across borders. The agency has international tasks in all areas. Swedac works with international projects in order to contribute to an infrastructure for accreditation and quality control in developing countries. The agency's activities are based on instruction and appropriation directions from the Government as well as legislation and agreements within Europe and globally. More information on Swedac and contact information is available at www.swedac.se.

Section 2 Those applying for a gambling licence must submit documentation of completed inspection, testing and certification to the Swedish Gambling Authority.

The report must clearly specify which evaluation methods have been used in the inspection, testing and certification processes.

In order to ensure that the accredited body meets all the requirements in Chapter 3, issued certificates and other documentation relating to the operation must be attached.

Section 3 The inspection record, testing record and certification record must be renewed at least every twelve months.

If the accredited body finds any faults or irregularities in the ongoing operation that are of relevance to the licence, the licence holder must immediately notify the Swedish Gambling Authority.

The licence holder must immediately notify the Swedish Gambling Authority if the issuing body revokes a certificate.

Business-to-business (B2B) is a marketing strategy comprising the sale of goods and services between companies. There are primarily three sub supplier groups that are relevant to the regulations. A sub supplier providing goods such as word processing software, a physical firewall, a sub supplier providing services such as operation, maintenance or updates of all or parts of a gamin service, or services such as customer service, HR, etc. The different types of sub supplier are relevant in relation to Chapters 4–6 of the regulation.

To begin with, there is a difference between goods and services. Goods are controlled by the licence holder as it is purchased in complete condition, updates are installed by the licence holder, and the goods are part of the licence holder's own information assets. In the assessment by the accredited body, such goods are included in the licence holder's gambling and business system. A change in such information assets will only prompt revision within the licence holder's operation. The extent of such a revision depends on how the licence holder has classified the information asset. A piece of word-processing software may be classified as less critical, with low relevance during a revision, unlike a gambling system for poker, for example.

A service is inspected by the service provider. Updates are managed by the service provider. The assessment by an accredited body must also comprise the licence holder's service provider. Any change affecting the information asset, such as a poker service, means that a revision must be made by the licence holder as well as the service provider. If a sub supplier provides the same service to multiple licence-holders, this may entail an enormous administrative burden for the licence-holders, the accrediting bodies and the Swedish Gambling Authority. Those providing a service to multiple licence holder may also be inspected, tested or certified in accordance with Chapter 2 of these regulations. A change with the service provider will therefore have an impact on all the licence-holders.

Chapter 3 Accredited bodies

For the formulation of the accreditation scope, see appendix 1.

Scope

Section 1 The accrediting process must comprise information security, inspection, testing and certification, as well as risk and vulnerability analyses.

Competence requirements for the accredited body

Section 2 Those applying for accreditation must have experience of work with management systems for information security, inspection, testing, certification and risk and vulnerability analyses.

There is nothing to prevent those wanting to become accredited from only applying for parts of the accrediting process. Applicants for accreditation must have experience within the parts referred to in their application.

General advice:

Experience refers to at least three years' experience of testing and evaluating management systems for information security, at least two years' experience of risk and vulnerability analyses, or equivalent experience.

Competence requirements for staff of the accredited body

Section 3 Inspection, testing and certification must be carried out by staff with adequate and documented training.

Staff must be available who have at least five years' experience of inspecting and testing gambling systems, gambling services and online activities, or equivalent experience.

Staff must be available who have at least five years' experience of risk and vulnerability management, or equivalent experience.

Cited experience and competences must be proven through certificate or similar documentation.

General advice:

Adequate and relevant training may also include other qualifications that allow staff to achieve sufficient competence for the task or tasks.

For work with random number generators and other lot-drawing equipment, the responsible supervisor should have a master's degree or PhD in mathematics, statistics or other subject relevant to the assignment.

Such qualifications must be documented in the same way as other training, and for work with information security, this can include certifications in accordance with:

- International Information Systems Security Certification Consortium (ISC)² Certified Information Systems Security Professional (CISSP);
- Payment card industry (PCI) Qualified Security Assessor (QSA); or
- Information Systems Audit and Control Association (ISACA) Certified Information Systems Auditor (CISA).

For work with risk and vulnerability analyses, the following certificates can be relevant:

- International Council of E-commerce (EC-Council) Certified Ethical Hacker (CEH);
- EC-Council Licensed Penetration Tester (LPT);
- Information Assurance Certification Review Board (IACRB) Certified Penetration Tester (CPT);
- Global Information assurance Certification (GIAC) Certified Penetration Tester (GPEN);
- CESG CHECK Team Leader;
- CESG CHECK Team Member;
- CREST Infrastructure Certification;

- CREST Registered Tester;
- Tiger Scheme Senior Security Tester; or
- Tiger Scheme Qualified Security Tester.

Inspection, testing and certification can be carried out by staff groups that meet the set requirements all in all.

Chapter 4 The licence holder's information security

Information processing is a central support function in all types of services. It is important to be able to protect information and to have a high level of consumer protection and security in the games. It must be possible to ensure access to information in both the short and long term. In order to achieve good information security, it is not enough to apply administrative measures such as regulations, training/information, compliance control, as well as measures that can be taken in IT systems and communication solutions (IT security). Information processing equipment must also be protected from various risks, through physical protection or physical IT security.

One important factor of protecting the information is thus the physical protection surrounding various types of IT environments. Planning, developing and administering IT environments is a large financial commitments, and it is not always easy to determine which measures are suitable and reasonable in order to provide the information with sufficient protection.

The licence holder must have procedures in place such as policies, guidelines, regulations and advice, depending on what it is they need to protect.

Protection of information

Section 1 Important information must be protected from physical and logical breaches and other external influence, and the information must be available when needed.

It is up to the licence holder to determine what constitutes important information. In accordance with Chapter 5, the licence holder must keep a list classifying the information assets. Important information should always include, at the least, transactions, game conditions, client database, version history, logs. A large part of the information must not only be available to the licence holder, but also to the accredited body for inspection, testing and certification, as well as revision, and of course to the Swedish Gambling Authority upon request.

Personnel administration

Section 2 There must be a policy and procedures to regulate employee authorisations in gambling and ERP systems.

A corresponding policy, establishment of access descriptions and procedures as described in the first paragraph, must be written for other persons who need access to gambling and ERP systems.

Policies and procedures must be documented and regularly updated.

General advice:

A policy with associated procedures can include

1. detailed work descriptions for each employee;
2. which access to information is required for each work description, i.e. for the completion of work tasks;
3. in what way changes in the work description are also reflected in what information the employee will have access to; and
4. description of which steps to take upon termination of employment.

Access to a gambling system should be divided into different functions in regard to different user groups. The different functions, such as functions, groups, individuals, systems, must then be assigned different functions and thereby different access. There should be an access description with associated individuals or systems for each function. In order to simplify revision, the access descriptions should be updated at least once per year in conjunction with the renewal of inspection, testing and certification records in accordance with Chapter 2, Section 3.

It is common for security guards, service technicians, property managers, cleaners and other similar groups to also have access to areas where sensitive information is being kept. Most often, these staff groups are not employed by the same organisation. Even if there is a contractual relationship, this does not mean that liability

and authority are regulated in the same way. For this reason, these external staff groups should not have free or unregulated access to such areas.

Access restrictions

Section 3 The gambling and ERP systems must be placed in an area adapted for the purpose.

All entry points to the area where the gambling and ERP systems are handled or stored must be guarded by personnel or technical equipment for access control.

The scope of this access control must be adapted to the regulations regarding risk and vulnerability analyses set out in Chapter 5.

Passcards, codes and keys to areas where the gambling and ERP systems are being handled or stored must be controlled to ensure that there is no unauthorised access.

General advice:

A space adapted to the purpose may comprise one or more rooms.

An organisation's choice of where to place its gambling and ERP systems can have a great impact on improving security. The area should therefore be well adapted to the purpose in order to avoid external threats and reduce the consequences should such threats be realised.

Section 4 Systems for operation and testing must be logically separated.

Systems for testing of generation and validation, as well as actual generation and validation of bases for physical lottery tickets must be logically separated.

Tests and trials of new versions or functions in a gambling system are always carried out in logically separate systems.

Authentication

Section 5 Gambling and ERP systems must be equipped with technical and administrative measures to identify the user, the user's system authorisation and registration of the user's activities.

All access to the gambling and ERP systems must be registered.

Codes, passwords or equivalent for the gambling and ERP systems are personal and may not be disclosed or shared, and they must be provided with a level of protection appropriate for the information.

It is important for the licence holder to maintain control over who has access to the area where the gambling and business systems are kept. In order to do so, it is essential to limit access to gambling and business system to the employee group that has an established need.

A catalogue service can be used to control, register and store access to gambling and business systems. A catalogue service allows authorised access to be linked to the user's rights and for them to be registered when using the service. Codes and passwords should not be shared between users, and should not be joint. One-time passwords can be used as long as it is possible to determine who has requested them and that they are authorised to do so.

Section 6 The gambling and ERP systems must have a function that continuously registers user identity, date and time of login and logout, and any other activities of relevance to information security.

See Chapter 4, Section 19 for the applicable time system.

Section 7 Events outside the technical equipment that have an impact on the gambling and ERP systems must be registered.

General advice:

Examples of such events outside the technical equipment that have an impact on the gambling and ERP systems include fire and water damage.

Registration of events in accordance with Section 7 can be done manually.

Communication and operation

Section 8 It must be possible to safely shut down the gambling and ERP systems in the event of disruption or failure in the electricity supply or communications.

There must be an auxiliary power system to safeguard data integrity, register history, backup data and

allow games that are in progress to come to an end.

Section 9 The gambling and ERP systems must have a function that registers all attempts at unauthorised access to the system and other events, and which creates event reports with time stamps.

Section 10 The gambling and ERP systems must be protected against unauthorised intrusion and the insertion of unauthorised and malicious code.

The gambling and ERP systems must have a function to discover malicious code.

There must be documented procedures for updating protection against unauthorised and malicious code.

Section 11 All system changes in accordance with Chapter 6 and any other discrepancies in the gambling and ERP systems must be monitored and registered.

Chapter 6 contains provisions on version management, and Section 18 of this chapter regulates storage periods.

Section 12 The gambling and ERP systems must be backed up at least once per day.

It must be ensured that the systems can be restored from the latest backup point to the time of a possible disruption

In order to simplify the assessment made by the accredited body, the licence holder should provide procedures for backup and for restoration in case of a disruption. In order to simplify revision, these functions should be tested at least once per year in conjunction with the renewal of inspection, testing and certification records in accordance with Chapter 2, Section 3.

Section 13 The gambling and ERP systems must be equipped with appropriate firewalls.

Firewalls must be set up to ensure that no other equipment in the same network can create alternative network paths.

Firewall access must be documented in work descriptions and access descriptions.

All access to a firewall must be registered.

All incidents that affect or are intended to affect the firewalls must be registered.

Information in the fourth paragraph does not need to be stored for longer than three months in accordance with Section 18 of this chapter.

Section 14 Information must be stored and transferred securely.

Files containing information revealing winnings must be handled so that no unauthorised user can copy or otherwise misuse or damage the data.

If a public network is used for the transfer, the data must be encrypted and the separate subsystems must verify the dispatch and reception and also be protected from incomplete transfers, disruption and copying and sending of unauthorised replies.

Chapter 5 states that the licence holder must keep a list classifying their information assets, and based on that classification, they must also assess which information is to be stored and transferred securely.

In the case of encrypted transfer, an established standard should be used in order to ensure that the information is transferred and stored securely.

Section 15 There must be documented procedures for the handling of portable data media.

If information revealing winnings is sent on data media by post, or equivalent manner, a transport option must be selected that meets the requirements set out in Section 14, second paragraph.

General advice:

Portable data media may include laptops and portable memory devices.

Section 16 Only functions that are necessary for the purpose of installing new software shall be activated.

Maintenance and updating of applications in a gambling and ERP system must be done in a secure and controlled manner.

Section 17 Software must be identifiable by name and version number.

The source code of the gambling system must have comments explaining the function of the code.

Storage of registered information, events and logs

Section 18 Registered information, events and logs are to be stored in accordance with Chapter 16, Section 5 of the Gambling Act (2018:1138), kept unchanged and be protected from unauthorised access.

Registered information in accordance with Section 13, fourth paragraph, must be stored for at least three months.

Time reference

Section 19 The gambling system must register time.

All information, events and logs are to be registered in real time.

UTC is to be used as the time reference system.

Chapter 5 The licence holder's risk and vulnerability management

Section 1 The licence holder must carry out a risk and vulnerability analysis to systematically identify and document in a list the information assets of the gambling and ERP systems.

This work also includes considering the operation's dependence on external activities. The choice of method for the risk and vulnerability analysis must be documented.

General advice:

ISO 31000:2009 contains principles and general guidelines for risk management.

A risk and vulnerability analysis and a list in accordance with Section 1 can contain the following elements:

1. identification of information assets which must be protected/functional at all times (What is to be protected?);
2. identification of risk sources that may impact/threaten identified information assets (What could happen?);
3. risk analysis (How likely is it, and what would be the consequences if it occurred?) risk evaluation to determine which of the identified risk sources need to be further processed and which measures must be taken in response to identified risks;
4. assessment of the ability to resist and manage identified risk sources; and
5. risk processing through identification and prioritisation of measures in response to the analysis results.

Section 2 For each information asset in the list, the following information must be provided

1. a definition of the information asset;
2. a unique identification number;
3. a version number;
4. identifying features of the information asset;
5. decision maker entitled to make decisions regarding changes in the information asset;
6. internal risk evaluation;
7. checksum for information assets classified in accordance with Section 3, second paragraph, points 2–3; and
8. the geographical location of physical information assets.

The complete list will form the basis of the accredited body's assessment of the licence holder's information assets pursuant to Section 2.

In subsequent audits, the list will show any changes made between the assessment dates, and the accredited body can then revise its earlier assessment.

Section 3 Each information asset defined in accordance with Section 2 must be classified according to the following four criteria:

1. player information – information worthy of protection;
2. integrity of the gambling and ERP systems;
3. availability of player information; or
4. traceability.

Each classification must be assessed according to the following:

1. no relevance (the information asset has no impact on the respective criteria of points 1–4 in the first paragraph);
2. some relevance (the information asset may have an impact on the respective criteria of points 1–4 in the first paragraph); or
3. high relevance (the respective criteria of points 1–4 in the first paragraph are dependent on the information asset).

General advice:

Depending on whether and how virtualisation, e.g. cloud services, is used in the gambling and ERP systems, redundancy and availability of data may be affected. Different methods of virtualisation may entail different classifications of an information asset. The licence holder should be attentive to how the classification of a hardware information asset is affected and possibly changed depending on the internal or external selection or development of visualisation.

If an external cloud service provider is used, it should be ensured that they meet the requirements set out in the regulations.

Section 4 The licence holder must appoint a decision maker responsible for risk and vulnerability analysis as well as management of information and incidents that may arise in accordance with this chapter.

There must be documented procedures for monitoring, detection, analysis, management, reporting and registration of security and information security incidents.

Section 5 There must be a function and documented procedures for the management of breaches and attempted breaches of the gambling and ERP systems.

All intrusions and attempted intrusions of the gambling and ERP systems must be registered.

Chapter 6 The licence holder's system changes

Section 1 There must be a documented process for version management and a version management system for updates or changes of the information assets listed in accordance with Chapter 5, Section 2.

Section 2 Updates or changes to an information asset classified as critical and of high relevance in accordance with Chapter 5, Section 3, second paragraph, must immediately be reviewed by an accredited body.

Updates or changes to an information asset that has been classified as having some relevance in accordance with Chapter 5, Section 3, second paragraph, must be reviewed in conjunction with the regular certification process pursuant to Chapter 2, Section 3, first paragraph.

Section 3 If there is an internal function managing quality assurance of updates or changes to information assets, the accredited body may approve changes being made without review pursuant to Section 2, first paragraph, provided that

1. the function is organisationally separate from the function implementing the updates or changes, and
2. the function has personnel with adequate training and experience.

Updates or changes to an information asset in accordance with the first paragraph must be reviewed in conjunction with the regular certification process pursuant to Chapter 2, Section 3, first paragraph.

Section 4 In case of update or changes to information assets in accordance with Section 1, a risk and vulnerability analysis must be carried out.

Section 5 There must be a decision maker appointed to take responsibility for and make decisions regarding each update or change to an information asset.

Section 6 A version management system must contain information regarding requests for changes, approved changes and implemented changes to information assets.

Previous versions of information assets must be stored and made available for audit.

General advice:

Previous versions of information assets in the form of hardware may be destroyed.

Chapter 7 and forwards

Gambling activities must ensure strong consumer protection, and there must be a high level of security in the games. There is a need to protect the players, partly to prevent gambling in the event of suspected fraud or other game-related forms of crime, and partly in case one or more games are faulty. The licence holder must then be able to deactivate one or more games, or one or more players.

In order to clarify to the accredited body which requirements need to be inspected, tested or certified, the requirements are written in **bold** as of Chapter 7. Unlike the previous chapters, the provisions of Chapter 7 and the following chapters refer to specific games. Information that is to be written in a game's rules, or which must be registered or documented, is part of the licence holder's duties and is included in the Swedish Gambling Authority's supervisory responsibilities.

Chapter 7 Functions for the licence holder's game administration

Activation and deactivation of games

Section 1 The licence holder must be **able to immediately activate or deactivate each game or its players; either one or more games, or an individual player or all players at once.**

Measures pursuant to the first paragraph must be registered and documented.

General advice

A game can for example be deactivated by temporary concealment if the licence holder discovers faults in the game or relating to an individual player.

Section 2 It must be possible to **finish playing** a game that has been deactivated.

For games played in several steps, it must be possible to **finish playing the game** when the player next logs in.

Interrupted games

Section 3 It must be possible to finish playing an interrupted game, unless otherwise specified in the rules of the game.

An interrupted game must be shown to the player, along with any bets made, once the gambling system is reconnected.

Bets referred to in the second paragraph must be **kept separate and be separately reported** in the player's player account until the game is finished.

General advice:

A game can be considered interrupted if, for example, the gambling system is disconnected from the player's equipment, if the gambling system or the player's equipment restarts, or if the gambling system is unexpectedly shut down.

A game can also be considered interrupted if it has not been possible to finish a game or a race has been cancelled.

Section 4 If an interrupted game is **not finished within 90 days, it must be terminated.**

The rules of the game must clearly state what will happen to a player's bet if a game is terminated before being finished.

Fault management

Section 5 There must be documented procedures for all games on how to manage faults and deficiencies.

The rules of the game must clearly state what applies in relation to the player in the event of faults and deficiencies.

Section 6 Any errors and faults that arise must be registered and documented.

Causes and solutions of errors and faults in the first paragraph must be registered and documented.

Registration and documentation can be carried out automatically in the gambling system or manually in accordance with documented procedures. If the registration is made automatically in the gambling system, the accredited body must verify the existence and performance of such a function.

Section 7 It must be ensured that an interrupted game or other errors and faults **will not negatively affect a player's player account or game balance.**

In the event that a player is unable to finish a game due to errors and faults, there must be a function

calculating the amount that will be returned to the player.

Section 8 The value of a pot must not be affected by errors and faults.

Chapter 8 Information that a gambling system must be able to generate

In addition to the information that a gambling system must be able to generate pursuant to Chapter 8, there are also requirements relating to reporting to the Swedish Gambling Authority set out in Section 21 of the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS 2018:2) The information that is to be reported every six months in accordance with Section 21 is specified below.

Section 1 It must be possible to create reports, in the gambling system or manually, regarding suspected cheating, as referred to in Chapter 19, Section 6 of the Gambling Act (2018:1138).

It **must be possible to create reports**, in the gambling system or manually, regarding suspected cheating, collusion between players, attempted cheating and collusion between players, as well as other registered violations of the terms of use and rules of the game.

It **must be possible to create reports**, in the gambling system or manually, regarding illicit manipulation of the outcome of a game subject to betting.

Section 2 The gambling system must have a **function for generating reports** regarding deviations or changes in a player's gambling habits and gambling patterns which result in responsible gambling measures.

Chapter 14, Section 1 of the Gambling Act (2018:1138) regulates the licence holder's duty of care. A licence holder must ensure that consideration is given to social and health protection aspects of the gambling activities, in order to protect players from excessive gambling and to help them reduce their gambling if needed. The licence holder must continuously monitor the players' gambling behaviours.

Section 3 The gambling system must have a **function to generate reports for all player registrations**.

The gambling system must have a **function to generate reports for all open and closed temporary player accounts** referred to in Chapter 13, Section 4, first paragraph of the Gambling Act (2018:1138).

Chapter 12, Section 1 of the Gambling Act states that a licence holder must register those who wish to participate in gambling. Chapter 13, Section 1 states that a licence holder who is licensed for online gambling must open a player account for each registered player. A licence holder may open temporary player accounts under certain circumstances.

Section 4 The gambling system must have a function to generate reports for all registered players, the players' account information and registration dates.

Section 5 The gambling system must have a **function to generate reports of all players that have excluded themselves from gambling for 24 hours, for a certain period of time or indefinitely, in accordance with Chapter 14, Section 12 of the Gambling Act (2018:1138)**.

Section 6 The gambling system must have a **function to generate reports of all players who have set limits in terms of time, bets or deposits to their player account**.

The gambling system must also have a **function to generate reports on the number of players who have lowered or raised their limits in terms of time, bets or deposits to their player account**.

Section 7 The gambling system must have a **function to generate reports on inactive player accounts**.

General advice:

It should be clear from the licence holder's agreement with the player when a player account is considered inactive and what will happen to any outstanding balance once the account has been inactive for a certain period of time.

Section 8 The gambling system must have a **function to generate reports on all player accounts that have been closed**.

If a player account has been closed, it must be **indicated why it was closed and whether it was closed by the player or the licence holder.**

Section 9 The gambling system must have a function to generate reports on all player accounts with a positive balance which have been closed for more than five working days.

Section 10 The gambling system must have **a function to generate a report for each player account.**

General advice:

A report should contain information on balance, deposits, bets, winnings and withdrawals.

Section 11 The gambling system must have **a function to register the full login session of an individual player.**

It must be possible to provide the following in one or more reports in accordance with the first paragraph

1. **player ID;**
2. **start and end time of the login session;**
3. **player equipment;**
4. **total bets during the login session;**
5. **total winnings paid out during the login session;**
6. **total deposits to player account during the login session (time-stamped);**
7. **total withdrawals from player account during the login session (time-stamped);**
8. **time of final confirmation during the login session;**
9. **reason for terminating a session; and**
10. **identification of games and versions played during the login session.**

Section 12 The gambling system must have **a function to register and generate one or more reports with information on the player's transactions during the login session.**

It must be possible to provide the following in one or more reports in accordance with the first paragraph

1. **player ID;**
2. **start time of the game;**
3. **the player's balance at the start of the game;**
4. **bet (timestamped);**
5. **contribution to the pot;**
6. **status of the game;**
7. **outcome of the game (timestamped);**
8. **distribution of the pot;**
9. **end time of the game;**
10. **winnings;**
11. **the player's balance at the end of the game; and**
12. **all interrupted games and the reason why they were not finished.**

Section 13 The gambling system must have **a function to register and generate one or more reports regarding events in the gambling system.**

It must be possible to provide the following in one or more reports in accordance with the first paragraph

1. **substantial winnings;**
2. **large transfers of funds;**
3. **changed terms of a game;**
4. **changed terms of a pot;**
5. **new pots;**
6. **player participation in the pot;**
7. **distribution of the pot; and**
8. **interrupted games with a pot.**

Section 12 The gambling system must have **a function to register and generate individual and aggregate reports on one or more of the licence holders rounds.**

It must be possible to provide the following in one or more reports in accordance with the first paragraph

1. name and serial number of the round;
2. start time of the round;
3. end time of the round;
4. total turnover;
5. number of bets;
6. licence holder's bet;
7. financing of the pot;
8. value of the pot before the start of the game;
9. value of the pot at the end of the game;
10. possible outcomes;
11. actual outcome;
12. total amount of winnings;
13. total number of winners;
14. number of winners at each level;
15. number of right answers;
16. total payout; and
17. number of players who did not complete the round and the reasons for this.

General advice:

A possible outcome can be a situation in which there is a possibility for a unique outcome that is not directly indicated in the relevant payout table, for example in 1X2 betting on a football match.

Chapter 9 Functional requirements for the licence holder in relation to the players

For games in accordance with Chapters 7 and 8 of the Gambling Act (2018:1138), Section 15 of the Swedish Gambling Authority's regulations and general advice on responsible gambling states that the player must be given clear information at each login regarding the licence holder's responsible gambling measures, the player's limitations of deposits pursuant to Chapter 14, Section 7 of the Gambling Act, and the player's accumulated losses over the last twelve months. In its assessment, the accredited body must verify that the licence holder meets this requirement.

Registration of the player and access to the gambling system

Section 1 The gambling system must have a **function to register players**.

The player's access must be authorised **using a personal and unique access code** every time they log in to the gambling system.

General advice:

Following the initial registration, for which the Gambling Act requires the player to prove their identity with bank ID or similar, the licence holder may continue to request verification by bank ID or similar. The licence holder may alternatively choose to have the player create a user name with an associated access code.

A function in the gambling system should inform the player of how they can set up a unique and secure access code.

Chapter 12, Section 1 of the Gambling Act (2018:1138) states that a licence holder must register those who wish to participate in gambling. Chapter 13, Section 2 states that when a player logs in to their player account, the licence holder must satisfactorily verify the player's identity.

Section 2 The gambling system must have a **function to verify the player's age**.

Chapter 14, Section 2 of the Gambling Act (2018:1138) states that games subject to licensing may not be offered to anyone under 18 years of age. Gambling may only be offered if it is possible to verify the player's age.

Section 3 If a PEP check has been performed in accordance with Chapter 3, Section 10 of the Anti-Money Laundering Act (2017:630), **the check must be registered in the gambling system**.

General advice:

Registration can be performed by adding a PEP box in the player register indicating 'yes' or 'no'.

The accredited body must verify whether there is a possibility of registering PEP checks. The term PEP is defined in Chapter 1, Section 2, point six, as a person who holds or have held a prominent public function in a country or in the management of an international organisation.

Section 4 All logins to a player account and all attempted logins must be registered.

The gambling system must have a **function to detect any attempts at unauthorised access** to a player account.

If an unauthorised person has attempted to access a player account, the player **must be informed immediately** and thereafter in accordance with the agreement between the licence holder and the player.

General advice:

A notice of attempted unauthorised access to a player account can be communicated in the manner that the licence holder deems to be appropriate at the time, for example via text message, e-mail or information upon login.

Section 5 A player's identity, and the date and time must be registered each time they log in and out.

When a player **logs in to the gambling system, the time and date of their latest login must be available** to the player.

Section 6 The gambling system must have a **function and documented procedures for the secure change of access codes.**

It must not be possible for the licence holder to unilaterally change a player's access code.

General advice:

If needed, a temporary code can be sent to the player's registered e-mail or registered mobile phone number.

Player account

Chapter 13, Section 1 of the Gambling Act (2018:1138) states that a licence holder who is licensed for online gambling must open a player account for each registered player.

Section 7 of the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS2018:2) states that, in conjunction with opening an account, the customer must agree to the separate terms and conditions pertaining to the protection of the players' money in the event of the licence holder becoming insolvent. The accredited body must verify the existence of a function for players to agree to such terms and conditions before being allowed to open a player account. The accredited body does not need to consider the contents of the terms and conditions.

Section 7 The gambling system must have a **function to manage and register all financial transactions going in and out of a player account** in accordance with Chapter 13, Section 3 of the Gambling Act (2018:1138).

The player's ability to keep track of their gambling is essential from a consumer protection perspective.

The licence holder must give the player access to information on the player account's balance, gambling history, deposits and payments and any other transactions. Gambling history refers to transactions in the form of bets, winnings and losses. Other transactions can refer to bonuses, etc. Chapter 13, Section 3 of the Gambling Act (2018:1138) states that all financial transactions to and from a player account must be registered.

The information must be available to the player in the player account for at least twelve months. The accredited body must verify that there is a function to ensure that the information remains available to the player for twelve months.

In order to prevent fraud, it should not be possible for a licence holder to allow the transfer of money, tokens or similar between player accounts

Section 8 When funds are deposited into a player account, the licence holder must be able to verify that the account holder for the provided bank card/bank account or other payment service is the same person as the holder of the player account.

The first paragraph still applies if a player changes bank cards, bank accounts or other payment service.

General advice:

This verification can be done using bank ID or similar.

The aim of this regulation is for the licence holder to be able to verify that the customer is an authorised user of the payment solution the customer has provided. When it comes to bank accounts or other payment services, the licence holder should therefore reserve the right to request the information/documents from the customer that are needed to, as far as possible, ensure that the customer has right of disposal for the provided account or that they are an authorised user of the payment service. In regard to bank cards, the licence holder should exercise customary control to verify that the customer is using their own card and that the card has not been suspended. Provisions regarding certain obligations for those conducting services in accordance with the Gambling Act (2018:1138), for example in regard to customer knowledge, are found in the Anti-Money Laundering Act (2017:630).

Chapter 13, Section 5 of the Gambling Act (2018:1138) states that a licence holder may only receive deposits from a payment service supplier in accordance with the Payment Services Act (2010:751). This means that the licence holder may not accept cash.

The accredited body must test the function used by the licence holder to comply with this rule.

Section 9 A player must be able to see their balance in the player account immediately after each completed transaction.

There must be a function to show the player which games they have participated in, all the bets made and all the winnings paid out in accordance with Chapter 13, Section 3, first paragraph of the Gambling Act (2018:1138).

Chapter 13, Section 3 of the Gambling Act (2018:1138) states that all financial transactions to and from a player account must be registered. The information must be available to the player in the player account for at least twelve months. The accredited body must verify that there is a function to ensure that the information remains available to the player for twelve months.

Limitations of deposits, losses and login sessions

The individual is responsible for their own gambling, but some have a limited ability to gamble responsibly and with restraint. Gambling addiction must be considered a very serious issue. The negative effects of gambling must be counteracted. There is therefore a need for various responsible gambling measures, such as information and other proactive measures on the part of the licence holder. Necessary measures should be taken to give players the greatest possible insight into their own gambling behaviour.

Such measures may include the creation of a model to in various ways illustrate the player account to the player, as stated in Sections 7 and 9, and to follow up on the limitations set by the players in terms of time and bets. Licence holders should furthermore be obligated to give the players feedback on their gambling behaviours and implement restrictions and limited access.

Section 9 of the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS 2018:2) contains provisions on the possibility of limiting the duration of login sessions. The player must be able to limit how much time they spend logged in each day, week and month. The accredited body must verify that this possibility is offered to the player.

Section 13 of the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS 2018:2) contains provisions for the licence holder to give the player regular, clear and varied notifications of their winnings and losses as well as information on how long the player has been logged in. Such notifications are to be given as often as needed to counteract excessive gambling. The notifications must be acknowledged by the player, who is to be given the option of confirming or interrupting the game. The accredited body must verify that these functions are in place. The contents of the notifications and whether the notifications are regular and varied falls under the Swedish Gambling Authority's supervisory responsibilities and is therefore not something that the accredited body needs to consider.

Section 10 For online games, there **must be a function for the player to easily set** a limit for deposits that can be made each **day, week and month**.

A player who has not set limits for deposits in accordance with the first paragraph may not gamble.

In the case of online games, a player must set an upper limit for deposits in accordance with Chapter 14, Section 7 of the Gambling Act (2018:1138). Chapter 11, Section 3 of the Gambling Ordinance states that limitations on deposits are to be stated per day, week and month.

Section 11 For online games, there must be **a function where the player can easily limit the time they spend logged in**.

Section 12 There must be a **function that can give the player warning messages regarding winnings and losses during the login session as well as information on how long the player has been logged in**.

Section 13 Only the player himself shall be able to set the limits pursuant to Sections 10 and 11.

Exclusion from gambling

Self-exclusion from gambling is considered an important responsible gambling measure. In order to ensure the break from gambling that the player feels they need, the players should be able to exclude themselves temporarily or permanently from gambling.

In accordance with Chapter 14, Section 11, first paragraph of the Gambling Act, licence holders pursuant to the same act must give players the possibility of excluding themselves from gambling permanently or for a limited period of time. A permanent exclusion may not be revoked for twelve months.

Online casino games, online bingo and computer-simulated gambling machines are games where the player can quickly lose large sums. For this reason, Chapter 14, Section 11, second paragraph of the Gambling Act (2018:1138) states that the licence holder's website must also have a so-called panic button that gives the player the option of immediately excluding themselves from such games for 24 hours.

Section 14 The gambling system must **have a function that allows players to easily exclude themselves temporarily or permanently from a game**.

Section 15 The gambling system must have **a function checking for self-exclusion or restricted gambling every time** a player registers or logs in to the gambling system.

Initiated game

Section 16 During gambling, there must be **a function and documented procedures to prevent the placing of a bet once the time set by the licence holder for lot-drawing or an event which will yield a future result has begun**.

General advice:

When relevant, betting can occur during an ongoing match or similar, for example bets on which team will score next or who will be the man of the match.

Chapter 10 Payout percentage

Chapter 14, Section 4 (2018:1138) states that a licence holder must keep information on the probability of winning the game easily available.

In conjunction with inspection, testing or certification of games, the accrediting body must verify the probability of winning and ensure that the correct payout percentage is given to the player. Chapter 5, Section 2, point 7 states that a checksum must be provided for certain classified information assets. For games, the payout percentage of the payout table is to be checksummed. A checksum is given jointly or respectively for the payout percentage and function. The list must specify the method used.

A checksum is defined in Chapter 1, Section 2, point 1, as figures appended to numbers or messages to allow discovery of changes and faults. Checksums are calculated using a specific mathematical procedure.

Section 1 For games with progressive winnings, **the minimum payout percentage must be indicated** to the player.

The player must also be given information on the probability of winning when playing a progressive game where the payout increases linearly in relation to the player's bet.

Section 2 The gambling system must have **a function to monitor the payout percentage** of each individual game.

Data that is generated in accordance with the first paragraph must be stored and kept available for audit.

The payout percentage can be based on probabilities. In some cases, the licence holder may indicate the smallest guaranteed payout percentage of a given playing cycle. A playing cycle should be of a reasonable length.

The licence holder should be able to produce a report of the payout percentages for each game.

Chapter 11 Game instructions, payout table and pot

Game instructions

Section 1 Game instructions must be complete, unambiguous and non-deceptive.

General advice:

Game instructions may be translated into other languages, in which case they must have the same content as the original instructions.

Section 2 Game instructions and rules must be available without placing a bet.

Section 3 Game instructions must be available through the same type of medium as the game.

Game instructions must be easily accessible.

General advice:

If the characteristics of a game change temporarily during an ongoing game, the game instructions should be automatically adapted to the change.

Payout table

Section 4 There must be documented quality assurance procedures to ensure that the configuration of payout tables is correct.

There must be documented procedures **to ensure that the calculations** of payout tables are correct.

General advice:

These procedures can be both automatic and manual.

In conjunction with inspection, testing or certification of games, the accrediting body must verify that the licence holder's calculations of payout tables are correct.

Pot

The provisions of Sections 5–7 fall under the Swedish Gambling Authority's supervisory responsibilities and is therefore not something that the accredited body needs to consider.

Section 5 There must be rules for how a player can win a pot. It must be clearly stated how the pot is financed and distributed.

Section 6 It must be clear from the rules how a pot will be divided if there is more than one winner.

Section 7 It must be clear from the rules how a licence holder can cancel or terminate a pot.

Chapter 12 Abnormal gambling patterns and cheating

Chapter 14, Section 16 of the Gambling Act (2018:1138) states that licence holders must have procedures

in place to detect and counteract actions covered by the provisions on cheating set out in Chapter 19, Section 4 of the Gambling Act, as well as violations of the terms of use and rules of the game.

Procedures to detect and counteract violations of the terms of use and rules of the game are not included in the assessment of the accredited body but fall under the Swedish Gambling Authority's supervisory responsibilities. The evaluation of whether the licence holder has the relevant competence to make the necessary assessments also fall under the Swedish Gambling Authority's supervisory responsibilities.

Section 1 The gambling system must have a function, and there must be documented procedures, to detect the occurrence of cheating and collusion between players, attempted cheating and collusion between players, and other violations of the terms of use and rules of the game.

The provision means that a licence holder must enable the detection and counteraction of criminal acts associated with gambling. This includes, among other things, that the licence holder must have systematic support in making the necessary assessments to enable detection of crimes such as cheating, collusion, attempted cheating and collusion between players.

Section 2 The gambling system must have a function that allows players to easily and immediately report suspected cheating, cheating, and collusion between players, attempted cheating and collusion between players, and other violations of the terms of use and rules of the game.

It is up to the licence holder to give the player the means to immediately bring cheating and other irregularities relating to the game to the licence holder's attention.

Section 3 There must be a function for analysing and producing data for reports on illicit manipulation of the outcome of a game subject to betting.

Section 4 There must be documented procedures to detect and counteract deviations and abnormal gambling resulting from manipulation of games and software.

Chapter 13 Functional requirements for random number generators

Chapter 2, Section 2 states that the licence holder must submit documentation of inspection, testing and certification to the Swedish Gambling Authority. The report must clearly specify which evaluation methods have been used in the inspection, testing and certification processes.

Section 1 The results from a random number generator must **be random, statistically independent, have a correct standard deviation and correct probability distribution.**

The results yielded by the random number generator **must not be predictable** without knowledge of the applied algorithm, implementation and initial values.

General advice:

There are several statistical tests that can be used to ascertain the results of a random number generator. The DIEHARD test suite (Marsaglia) and the NIST test suite (National Institute of Standards and Technology) are two of the tests that can be used.

Section 2 There **must be a documented reference to a well-established algorithm and any source code as well as to the recalculation procedure of the random number generator.**

If the random number generator is built in to the software, it must be **possible to present** the entire source code, along with comments and documentation.

General advice:

The algorithm that the random number generator is based on should be published in an internationally recognised publication.

The outcome tests that may be used on generated random numbers include the X2 test (chi-squared-test), the autocorrelation test and the runs test.

The licence holder can enable verification of the set payout table by having the accredited body or the Swedish Gambling Authority to review programmes, plates, logs, verification lists or other documentation for the payout table.

Information about the X^2 test

The X^2 test is performed as follows: Assume that the lottery consists of the numbers 1, 2, 3, ..., M . Each number should then be drawn with the probability $1/M$. If this is to be tested, N numbers shall be drawn so that $N=10 M$, i.e. at least ten times the number of lottery numbers. A table notes how many times each number is drawn in this series. Assume that number 1 is drawn n_1 times, number 2 n_2 times etc. Then calculate the following so-called test quantity:

$$T = \frac{(n_1 - N/M)^2}{N/M} + \frac{(n_2 - N/M)^2}{N/M} + \dots + \frac{(n_M - N/M)^2}{N/M}$$

T is then compared with a table showing the X^2 distribution. The number in the table, with which T is to be compared, shall correspond to $M-1$ degrees of freedom and the chosen risk of error (α) in the test performed. T shall not exceed this table value. A similar table is found in most basic textbooks in statistics (e.g. Hogg & Tanis. 2006). Alternatively, statistical functions are used in commercial software (e.g. Microsoft Excel) to calculate the so-called P value for the test quantity T . This P value shall not be lower than the chosen risk of error (α).

The value M is thus the number (slices in the Wheel / Number of possible outcomes in a ball draw) x 10. When calculating the P value, the Swedish Gambling Authority deems that the P value shall not be lower than 0.05. For physical lot-drawing equipment, a test is sufficient to approve the equipment. In case of a failed test, the test scope is expanded to double in size. Meaning, one test is performed first. If the outcome is below the P value, two new tests are done. All tests are combined in a total assessment.

Section 3 The random number generator **must be able to withstand the set maximum load**.

Testing of the random number algorithm call should be carried out to ensure that it can handle the maximum load. There must be no risk of the random number generator restarting or shutting down due to being called too often. It must be clearly indicated which evaluation methods have been used.

Section 4 Functions that do not generate outcomes in games but which depend on random elements **must be based on the results of the random number generator**.

General advice:

Such functions may include a randomised sequence or placement at a poker table during a tournament.

Section 5 Calculations based on a random number generator must have a **correct standard deviation** and **correct probability distribution**.

The numbers, symbols or events resulting from the random number generator **must correspond** with the rules set for the game involved.

General advice:

If the random numbers are translated into cards, for examples, there should be four aces, four kings, etc. in a normal deck, if the game uses a normal deck.

Section 6 The calculations of the random number generator **must correspond to the events registered in the gambling system**.

Section 7 If the rules of the game requires a sequence from a random number generator to be set in advance, it is only allowed to generate new sequences if this is stated in the rules.

Section 8 Unless otherwise specified in the rules of the game, the results from a random number generate must always be **independent of events** in the current or previous games.

The licence holder must account for the rules that may influence the course of events in Section 8 in order for the accredited body to be able to evaluate the technology.

Drawing equipment without a random number generator

Section 9 The results from drawing equipment without a random number generator must **be random, statistically independent, have a correct standard deviation and correct probability distribution.**

General advice:

The outcome tests that may be used on generated random numbers include the X2 test (chi-squared-test), the autocorrelation test and the runs test.

Section 10 Independent drawing equipment without a random number generator must be kept locked in with limited access.

Drawing equipment for live casino games

Section 11 Drawing equipment used in live casino games **must be monitored and recorded.**

The recorded material must show compliance with the rules of the game.

The recording must register date and time.

Chapter 16, Section 5 of the Gambling Act (2018:1138) states that information regarding the operation of the gambling system must be saved for at least five years.

Section 12 There must be physical access control for the premises used for live casino games and any associated areas.

There must separate access control, at least for different employee categories.

General advice:

Dealer, floor manager, supervisor, surveillance staff are examples of various types of employees that should be categorised into different authorisation groups.

Chapter 14 Functional requirements when agent terminals are used for bets and control

Control of software and technical specifications in regard to information must be verified to assess whether the functions correspond to the regulation.

Random inspections are performed on site by the Swedish Gambling Authority.

Chapter 14, Section 4 enters into force on 1 January 2020. If the functions are already available at the time of the assessment, they must be described in an inspection report.

Agent terminal

Section 1 The **gambling system must be able to clearly identify** an agent terminal.

General advice:

An agent terminal is part of the gambling system and identification can be made through validation of a checksum for the terminal's individual parts, or similar procedure to ensure the integrity of the whole system.

Section 2 Communication between an agent terminal and the other parts of the gambling system must be **protected during transfer by encryption or equivalent.**

Section 3 Player or payment transactions sent from an agent terminal to other parts of the gambling system must be **validated by the terminal at the end of the transaction before printout.**

Agent terminal for validation of winnings

Section 4 If an agent terminal is used to validate winnings, it must be fitted with a screen intended to communicate information to the player.

The following information must be displayed on the screen that is turned towards the player

- 1. form of gambling;**
- 2. bet;**
- 3. cancellation;**
- 4. amount won, or “no win”; and**
- 5. game closed.**

Chapter 15 Functional requirements for online games

Chapter 3, Section 1, points 1 and 3 of the Gambling Act (2018:1138) states that there must be a high level of consumer protection, and that the negative effects of gambling must be limited.

The licence holder must, for example, provide information regarding which type of games are offered and the costs of gambling. Furthermore, the licence holder must take measures to counteract social and economic harm and problem gambling. The negative effects of gambling must be limited.

A player must be able to see and understand information that enables an active and informed choice. Chapter 14, Section 1 of the Gambling Act (2018:1138) states that the player must be protected from excessive gambling. Section 17 of the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS 2018:2) states that there must be logotypes with links to self-assessments, restrictions (gambling budget), limitation of sessions and exclusion from gambling. The logotypes must be pinned at the top of all the licence holder's websites, mobile websites, applications and similar. The logotypes will be provided by the Swedish Gambling Authority. The accredited body must assess whether this provision has been fulfilled.

Game design

Section 1 Games with interactive options **must have illustrations that clearly show current and possible bets.**

Games in accordance with the first paragraph must clearly **illustrate the possibility of changing or resetting** the current bet.

In accordance with Chapter 14, Section 5 of the Gambling Act (2018:1138) and Sections 19–20 of the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS 2018:2), a game may not be designed or programmed to give players the impression of being close to winning, if this is not the case. A game also may not give the impression that the player's approach or choices have an impact on their probability of winning, if winning is exclusively down to chance.

Section 2 Each round **must last for at least three seconds.**

The first paragraph also applies to **autoplay functions.**

Section 3 A player's **participation in a game, and the choices made by the player in the gambling system, must be optional.**

A player must be given a **reasonable period of time to consider the consequences of a choice.**

Repeated choices made by a player in the gambling system **must not be able to be placed** in a queue.

General advice:

Choices that can be made include "buy", "pay", "spin", "play", "hold", "draw", "double".

Section 20 of the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS 2018:2) states that notification of choices influencing the outcome of the game must be shown to the player for at least three seconds before a choice is made automatically.

Visual presentation

Section 4 The name of the game **must be displayed on all pages associated with that particular game.**

Section 5 The gambling system must have a **function that continuously shows the player how long they have been logged in.**

Section 13 of the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS 2018:2) states that the player must be given regular notifications of how long they have been logged in. Chapter 14, Section 1 of the Gambling Act (2018:1138) states that the player must be protected from excessive gambling. The player should have some notion of how much time they spend gambling. Continuously visualising the time consumption to the player allows them to more easily get an idea of how long they have actually spent logged in. The requirement to continuously show the player's time consumption is not a hindrance or alternative to regular, clear and varied notifications in accordance with Section 13 of the Swedish Gambling Authority's regulations and general advice on responsible gambling.

Section 6 The gambling system must have a **function that continuously shows the player their balance** throughout the session.

Chapter 14, Section 1 of the Gambling Act (2018:1138) states that the player must be protected from excessive gambling. The player should have some notion of their own gambling.

Continuously visualising their balance to the player allows them to more easily get an idea of how much they have actually spent on gambling.

Section 7 The **bet on a game must be clearly** displayed.

The player's possible and actual bets, as well as the minimum and maximum bets, must be clearly displayed.

The gambling system must have a function that **clearly visualises the player's bet, including the total bets in the game.**

General advice:

An example of when a player's bet may be included in the total bets is when the player can bet on a combination of things happening in a single bet.

Section 18 of the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS 2018:2) states that all bets must be indicated in SEK. If another currency, credits or similar is used, they must always be indicated in SEK too. Chapter 14, Section 1 of the Gambling Act (2018:1138) states that the player must be protected from excessive gambling. The player should have some notion of their own gambling. Continuously visualising the actual cost to the player in SEK allows players to more easily get an idea of how much they have actually spent on gambling.

Section 8 A player must be **informed that there are factors beyond their control**, which may affect the game and its outcome.

General advice:

Factors that may affect a player include the use of automation or add-ons for automatic features.

Section 9 The outcome of a game **must remain visible for a reasonable period of time.**

What is considered reasonable must be based on what game it is, the size of the bet, the size of the winnings or losses along with other factors that may affect the extent of the outcome. The important thing is for the player to have a chance to take in the result.

Section 10 Computer-simulated gambling machines **must clearly indicate or illustrate which symbols represent a win.**

If different combinations of symbols lead to a win, **these must be clearly indicated or illustrated.**

Section 11 If the characteristics of a game change temporarily **the game must clearly indicate the current status** before the next game.

Section 12 A symbol that is used in a gambling system **must have the same shape and colour throughout that particular game.**

Section 13 The number of active decks as well as **which cards are included** in a particular game **must be clearly indicated.**

The front of the card must clearly show its suit and rank.

The rules of the game must clearly state when the cards will be shuffled.

General advice:

In different games, cards other than the playing cards may be included.

Section 14 If a non-traditional die is used in a dice game, **this must be made clear to the player.**

It **must be clearly indicated which side of a die wins a game.**

Section 15 A gambling system must have a function to prevent players playing against themselves.

A gambling system **must have a function to discover and prevent one or more players**

using the same gambling equipment at the same time.

Section 16 The current pot amount must be visible to all participating players.

Section 17 A player must immediately be informed of winning the pot.

Once a pot has been won, all players must be informed of its new value.

Information pursuant to the second paragraph must also be available to players who have not participated in the specified pot.

What is considered immediately informed must be based on the type of game in question, the size of the pot, the size of the bet along with other factors that may affect the scope of the pot. The important thing is for the player to have a chance to absorb the information.

Section 18 It must be clearly stated if a pot is not available to a player.

It must be ensured that all information given to the players is correct, regardless of whether or not a pot is available.

Chapters 1 and 4 of the Swedish Gambling Authority's regulations and general advice on state lotteries and lotteries for matters of public interest (LIFS 2018:4).

Lotteries subject to the Swedish Gambling Authority's regulations and general advice on technical requirements and accreditation of bodies for inspection, testing and certification of gaming service providers are also subject to the requirements on the technical properties of lottery tickets set out in Chapter 4 of the Swedish Gambling Authority's regulations and general advice on state lotteries and lotteries for matters of public interest (LIFS 2018:4). Chapters 1 and 4 of

The Swedish Gambling Authority's regulations and general advice on state lotteries and lotteries for matters of public interest are provided below. Chapter 1, Section 2 provides definitions of terms used. Chapter 4 states which requirements are applicable to the properties of physical lottery tickets.

In order to clarify to the accredited body which requirements need to be inspected, tested or certified, the requirements are written in **bold** in Chapter 4.

Chapter 1 Scope and terminology

Section 1 These regulations and general advice concern those licensed to provide State lotteries in accordance with Chapter 5, Section 1 of the Gambling Act (2018:1138) and those licensed to provide lotteries in accordance with Chapter 6, Section 3 of the Gambling Act.

Section 2 Unless otherwise stated, the terminology used in the regulations take the same meaning as in the Gambling Act (2018:1138) and the Gambling Ordinance (2018:1475).

In these regulations and general advice, the following definitions are used

1. *hidden UV feature*: an image or pattern printed with UV-fluorescent ink, which is not visible to the naked eye. The image/pattern must only appear under UV lights of the wavelength 365 nm and must fluoresce in a colour that differs from the background on which it is printed;
2. *post-drawn lottery ticket*: a lottery ticket that is not sealed, for which drawing takes place after purchase;
3. *electronic lottery ticket*: a physical carrier that may contain one or more lottery tickets and which has electronic components;
4. *distribution drawing*: a drawing where the lottery ticket is part of a drawing that determines the size of the winnings;
5. *pre-drawn lottery ticket*: a sealed lottery ticket, where the buyer can immediately see whether or not they have a winning ticket;
6. *chemical erasure prevention*: paper with chemicals that will cause a reaction discolouring the paper if subjected to a solvent or oxidant (alcohol, acids, hydrocarbons, chlorine, surfactants, etc.);
7. *copy protection*: document safeguards that are altered or become incorrect when copied;
8. *lifting*: removal of layer, such as scratch-off coating, which conceals game information;
9. *microtext*: small text with a maximum height of 0.30 mm and minimum length of 35 mm, which, without any aids, gives the impression of a line and which is fully and clearly legible in magnification;
10. *relief*: letters, figures or symbols that have been thickly coated to give the surface of the paper a raised profile, or letters, figures or symbols that have been punched into the surface of the paper, giving them an indented profile.
11. *reproduction*: representation made with the help of technical equipment with subsequent printing;
12. *game information*: information on the lottery ticket that determines whether or not it represents a win;
13. *watermark*: image or pattern created during paper making

which appears when the paper is held up to a light source. The image/pattern is made by creating variation in the thickness of the paper: thicker areas appear darker and thinner areas are lighter;

14. *security printing pattern*: thin lines of at least two colours and with a maximum line width of 0.10 mm, which intersect at sharp angles. May also consist of thin whole lines forming a motif that appears to be three-dimensional.

15. *overprint*: image or pattern printed on top of a scratch layer or equivalent, which is designed to give a clear indication of whether the scratch layer has been removed.

Chapter 4 The properties of physical lottery tickets

Section 1 An individual lottery ticket, which is included in a distribution drawing, **must be unique**.

An individual lottery ticket must be attributable to a batch or round in accordance with the licence granted.

Section 2 Printed or electronic lottery tickets must not have such physical defects or markings as could lead to a possibility of detecting the winning tickets.

It must not be possible to read any game information from a sealed ticket.

Sealed tickets must have protections from manipulation or reproduction.

Section 3 If there are any flaws in the lottery ticket properties, which means that it no longer fulfils the requirements set out in these regulations, production must be stopped and any lottery tickets produced be destroyed.

Section 4 For pre-drawn, sealed lottery tickets where the highest possible win exceeds one (1) price base amount **the following provisions apply**

- 1. it must not be possible to reseal an opened lottery ticket;**
- 2. it must not be possible to read game information by holding the ticket up to a light source;**
- 3. the game information must not protrude the outside of the seal;**
- 4. the lottery ticket must have copy protection;**
- 5. the lottery ticket must have a hidden UV feature;**
- 6. the scratch layer must have an overprint to conceal game information and control field;**
- 7. sealed control fields must have protection against lifting and reading;**
- 8. it must not be possible to read the game information with the help of static electricity;**
- 9. the game information must not have fixed positions;**
- 10. the game information must be protected against alterations; and**
- 11. the lottery ticket must have microtext.**

General advice:

Copy protection includes colours that are difficult to replicate, print or varnish that give different reflections, such as glossy varnish on matte paper or special paper.
The microtext must be placed under a scratch layer.

Section 5 For post-drawn lottery tickets where the highest possible win exceeds one (1) price base amount, **the following provisions apply**

- 1. the lottery ticket must have copy protection;**
- 2. the lottery ticket must have a hidden UV feature;**
- 3. the lottery ticket must have a security printing pattern;**
- 4. the game information must be protected against alterations;**
- 5. the lottery ticket must have microtext;**
- 6. the lottery ticket must be made from watermarked paper or paper with equivalent protection; and**
- 7. the paper must have protection from chemical erasure.**

General advice:

Copy protection includes colours that are difficult to replicate, print or varnish that give different reflections, such as glossy varnish on matte paper or special paper. The microtext must be placed under a scratch layer.

Paper with equivalent protection can mean that the lottery has a combination of different security measures to provide the equivalent protection of a watermarked paper.

Section 6 For electronic lottery tickets where the highest possible win exceeds 1/6 price base amount, **the following provisions apply**

- 1. if the lottery tickets are activated and restored, this must leave a clear trace;**
- 2. the lottery ticket must have a hidden UV feature;**

- 3. the lottery ticket must have copy protection;**
- 4. the lottery ticket must have a control field with overprint;**
- 5. electronics and display must be protected from manipulation; and**
- 6. the lottery ticket must have microtext.**

General advice:

Copy protection includes colours that are difficult to replicate, print or varnish that give different reflections, such as glossy varnish on matte paper or special paper. The microtext must be placed under a scratch layer.

Appendix 1.

Background information for those who intend to apply for accreditation in accordance with Chapters 2–3 of the Swedish Gambling Authority’s regulations and general advice on technical requirements and accreditation of bodies for inspection, testing and certification of gaming services (LIFS 2018:8).

- ISO/IEC 17021-1 Requirements for bodies providing audit and certification of management systems
- ISO/IEC 27006 Requirements for bodies providing audit and certification of information security management systems
- ISO/IEC 17020 Requirements for the operation of various types of bodies performing inspection
- ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories
- ISO/IEC 17065 Requirements for bodies certifying products, processes and services

Chapter 16, Section 3 of the Gambling Act (2018:1138) and Chapter 2, Sections 1–3 of the Swedish Gambling Authority’s regulations and general advice on technical requirements and accreditation of bodies for inspection, testing and certification of gaming services state that a large proportion of a licence holder’s gambling services must be assessed by an accredited body. The following is an account of each chapter of the regulation mentioned above, along with information on which accredited body is responsible for assessment.

A gambling company applying for a licence can opt for combinations of certificates/reports from both alternative A and/or alternative B to certify that they meet the requirements. Regardless of whether alternative A or B is selected, the licence applicant must submit the generated certificates and reports to the Swedish Gambling Authority as documentation for their licence application.

The Swedish Gambling Authority’s regulations and general advice on technical requirements and accreditation of bodies for inspection, testing and certification of gambling services	Alternative A Accredited for	Comment for A (Output)	Alternative B Accredited for	Comment for B (Output)
Chapter 4 Information security	ISO/IEC 17021-1 and ISO/IEC 27006	ISO 27001 certificate	ISO/IEC 17065	Carried out as a management system assessment (ISO/IEC 17021-1). Certificate issued*
Chapter 5 Risk and vulnerability management	ISO/IEC 17021-1 and ISO/IEC 27006	ISO 27001 certificate	ISO/IEC 17065	Carried out as a management system assessment (ISO/IEC 17021-1). Certificate issued*
Chapter 6 System changes	ISO/IEC 17021-1 and ISO/IEC 27006	ISO 27001 certificate	ISO/IEC 17065	Carried out as a management system assessment (ISO/IEC 17021-1). Certificate issued*
Chapter 7 Functions for game administration	ISO/IEC 17025	Test report to show that the functions exist.	ISO/IEC 17065	Carried out as testing activity (ISO/IEC 17025). The result is reported in an appendix to the certificate.*

The Swedish Gambling Authority's regulations and general advice on technical requirements and accreditation of bodies for inspection, testing and certification of gambling services	Alternative A Accredited for	Comment for A (Output)	Alternative B Accredited for	Comment for B (Output)
	ISO/IEC 17020	Inspection report to show that the functions work.		
Chapter 8 Information that a gambling system must be able to generate	ISO/IEC 17025	Test report to show that the functions exist.	ISO/IEC 17065	Carried out as testing activity (ISO/IEC 17025). The result is reported in an appendix to the certificate.*
	ISO/IEC 17020	Inspection report to show that the functions work.		
Chapter 9 Functional requirements in relation to the players	ISO/IEC 17025	Test report to show that the functions exist.	ISO/IEC 17065	Carried out as testing activity (ISO/IEC 17025). It can alternatively be done as a control activity under ISO/IEC 17065. The result is an integral part of the certificate. *
	ISO/IEC 17020	Inspection report to show that the functions work.		
Chapter 10 Repayment process	ISO/IEC 17025	Test report to show that the functions exist.	ISO/IEC 17065	Carried out as testing activity (ISO/IEC 17025). The result is reported in an appendix to the certificate.*
	ISO/IEC 17020	Inspection report to show that the functions work.		
Chapter 11, Section 4 Game play instructions, payout table and pot	ISO/IEC 17025	Test report to show that the functions work.	ISO/IEC 17065	Carried out as testing activity (ISO/IEC 17025). The result is reported in an appendix to the certificate.*
	ISO/IEC 17020	Inspection report to show that the functions work.		

The Swedish Gambling Authority's regulations and general advice on technical requirements and accreditation of bodies for inspection, testing and certification of gambling services	Alternative A Accredited for	Comment for A (Output)	Alternative B Accredited for	Comment for B (Output)
Chapter 12 Abnormal gambling patterns and cheating	-	Not included	-	Not included
Chapter 13 Functional requirements for random number generators (All parts)	ISO/IEC 17025	Test report of the correct function of random number generators	ISO/IEC 17065	Carried out as testing activity (ISO/IEC 17025). The result is reported in an appendix to the certificate.*
Chapter 14 Agent terminals	ISO/IEC 17020	Inspection report of the licence holder's compliance with the requirements.	ISO/IEC 17065	Carried out as a control activity under ISO/IEC 17065. The result is included in the certificate.*
Chapter 15 Functional requirements for online games (Introduction)	ISO/IEC 17020	Inspection report of the licence holder's compliance with the requirements.	ISO/IEC 17065	Carried out as a control activity under ISO/IEC 17065. The result is included in the certificate.*

The Swedish Gambling Authority's regulations and general advice on state lotteries and lotteries for matters of public interest are provided below	Alternative A Accredited for	Comment for A (Output)	Alternative B Accredited for	Comment for B (Output)
Chapter 4 The properties of physical lottery tickets	ISO/IEC 17025	Test report of the physical lottery tickets' compliance with the requirements in Chapter 4.	ISO/IEC 17065	Carried out as testing activity (ISO/IEC 17025). The result is reported in an appendix to the certificate.*

*The certificate is provided by a product certification body and includes all requirements set out in the Swedish Gambling Authority's regulations, as specified in the guide. The decision is partly based in the certification body's own assessments and partly on valid test reports which show that the gambling systems fulfil the requirements of the regulations in those parts that the accredited certification body has not tested.

The accreditation of the accredited bodies should be of the following scope.

Body	Accredited in accordance with current edition of standard	Scope
Certification body for certification of management system	ISO/IEC 17021-1 and ISO/IEC 27006	ISO 27001 for IAF code 33 and 39**
Certification body for certification of product	ISO/IEC 17065	The Swedish Gambling Authority's regulations and general advice on technical requirements and accreditation of bodies for inspection, testing and certification of gaming service providers (LIFS 2018:8), the Swedish Gambling Authority's regulations and general advice on state lotteries and lotteries for matters of public interest (LIFS 2018:4) and the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS 2018:2).
Test laboratory*	ISO/IEC 17025	The Swedish Gambling Authority's regulations and general advice on technical requirements and accreditation of bodies for inspection, testing and certification of gaming service providers (LIFS 2018:8), the Swedish Gambling Authority's regulations and general advice on state lotteries and lotteries for matters of public interest (LIFS 2018:4) and the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS 2018:2).
Inspection body*	ISO/IEC 17020	The Swedish Gambling Authority's regulations and general advice on technical requirements and accreditation of bodies for inspection, testing and certification of gaming service providers (LIFS 2018:8), the Swedish Gambling Authority's regulations and general advice on state lotteries and lotteries for matters of public interest (LIFS 2018:4) and the Swedish Gambling Authority's regulations and general advice on responsible gambling (LIFS 2018:2).

*The requirement for an inspection body to be independent is of Type A, and the requirement for test laboratories to be independent corresponds to the requirement set for the inspection body.

**IAF code 33: Information Technology, IAF code 39: Other social services (which includes lotteries).