Web-based gambling and sports betting system 2011.

Requirement specification
CONTENTS

1. Objective of the system .......................................................................................................................... 3

2. Business and functional requirements .................................................................................................... 3
   2.1. Player registration and players' registry ............................................................................................... 3
       2.1.1. Registration ................................................................................................................................. 3
       2.1.2. Responsible gaming standards and functions ................................................................................. 4
       2.1.3. Customer service functions (phone, e-mail, chat) ...................................................................... 4
   2.2. Internal account (wallet) and its functions ......................................................................................... 4
   2.3. Bonus system ....................................................................................................................................... 5
   2.4. Recharging the internal account ....................................................................................................... 5
   2.5. Required features of the gaming interface .......................................................................................... 5
       2.5.1. Personal data ................................................................................................................................. 5
       2.5.2. Account log .................................................................................................................................... 6
       2.5.3. Placing Bets ................................................................................................................................. 6
       2.5.4. Information area ........................................................................................................................ 6
   2.6. Base requirements for sports betting games ....................................................................................... 6
   2.7. Claim and payment of prizes ............................................................................................................... 7
       2.7.1. Payments to a bank account provided at registration ................................................................. 7
       2.7.2. Payments to an address provided at registration ...................................................................... 7
   2.8. Communication with the players ......................................................................................................... 7
   2.9. Further general criteria ...................................................................................................................... 8
   2.10. General legal requirements and provisions ..................................................................................... 8

3. Requirements of the central system ......................................................................................................... 8
   3.1. General requirements ........................................................................................................................... 8
   3.2. Monitoring and report system ............................................................................................................ 9
   3.3. Ability to customize game parameters through the central system .................................................. 10

4. Informatics requirement of the gaming system (security, hardware, availability) ................................... 10
   4.1. Hardware architecture requirements ................................................................................................. 10
   4.2. Base software requirements ............................................................................................................. 10
   4.3. Performance requirements ................................................................................................................ 11
   4.4. Data management provisions and protection of personal data .......................................................... 11
   4.5. Rights managements .......................................................................................................................... 11
   4.6. Logging requirements ........................................................................................................................ 11
   4.7. Monitoring system ............................................................................................................................. 11
   4.8. Border protection ............................................................................................................................... 11
   4.9. Backup strategy .................................................................................................................................. 12
   4.10. Archiving .......................................................................................................................................... 12
   4.11. Availability requirements ................................................................................................................ 12
   4.12. Internal or external locks .................................................................................................................. 12
   4.13. Testing procedures .......................................................................................................................... 12
1. **Objective of the system**

The objective of Szerencsejáték Zrt. (hereinafter "Company") is to purchase, integrate into its internal systems and operate a modern web-based gambling and sports betting system (hereinafter: "GSBS") that can efficiently challenge foreign web-based gambling sites and can provide an attractive alternative for those who currently do not perform their gambling activities via the Company's website. Company will offer a bookmaker gaming system with fast and high payback percentage, different from its current product portfolio.

This requirement specification describes the general system requirements and the services related to the bookmaker gaming; however, the tenderer shall also introduce other online games of the proposed system. Apart from the sports betting type games it shall provide details on other possible games of the system. This is required because Company intends to add other types of services to the bookmaker games in the future (once legal and other game-organizing obstacles have been removed).

The objective of the document is to describe GSBS's minimum requirements. If the tenderer offers a solution different from the requirements of the Requirement specification (e.g. a solution offering more services), it shall be introduced in full details.

2. **Business and functional requirements**

Buying credits is not a mandatory condition prior to entering into the games; the system should be accessible right after registration. The games can be played against an internal account (or wallet) to which funds can be transferred using various payment methods.

The proposed system shall offer other, alternative sales channels apart from the internet. The tender shall provide details on the supported channels and their means of connection (mobile internet, SMS, VLT, digital TV, etc).

2.1. **Player registration and players' registry**

2.1.1. **Registration**

The tender shall specify the data that the system can handle at registration; the data that can be set as required; the data that can be changed by the user; and the data that can be changed by the customer care agent with sufficient rights.

Tenderer must specify the most secure player database management possible (encrypted storing) and the use of online query functions (accessible only with appropriate rights).

Multiple registration is forbidden, thus the system shall check the uniqueness of specific data during the registration process (e.g. ID, email address, bank account and specific personal data). If any of these data already exists in the database, the new registration shall be refused and the user shall be duly notified. Players will be required to accept and consent to various terms all of which should be managed by the system.

The GSBS shall examine the security strength of the password provided at the registration (and shall warn the user if the password has been considered weak or unsecure).
2.1.2. **Responsible gaming standards and functions**

The tender shall specify the system's functions which support the responsible gaming standards and requirements of the organizer.

*Required functions*

a) Disabling features by the users and/or by the organizer:
   − temporary (disabling for a set periods of time),
   − final (in this case the player cannot play anymore in the web-based system nor can s/he re-register).

b) Self-limiting functions (limits), that can be applied by the user to limit the amounts of credit usable in/transferable to certain games (or in the overall system) per day, per week or per month.

c) Indication of the time spent at the site since the Login, including any related notification or warning messages based on pre-set parameters.

2.1.3. **Customer service functions (phone, e-mail, chat)**

The tender shall specify the customer service functions integrated into the system.

*Required functions:*

− administrator interface with adjustable rights levels for the customer service
− send/receive e-mails (single and bulk)
− internal system messages for registered users (single and bulk)
− online advertising space, news upload
− ticket system in with which customer service agents can track comments regarding a user

2.2. **Internal account (wallet) and its functions**

Every player shall have an internal account after the registration. The tender shall specify the structure of the internal account and the money stored in its different parts. The system shall also be able to manage gift and bonus points associated with an account, granted by the organizer. These points can only be used for gaming and cannot be converted to money.

The account shall be used by the player to pay the price of betting and to receive credit and smaller awards.

Awards with large amounts of money shall not be automatically credited to the players' account. Such awards (amount defined by Company) shall be paid according to rules set by regulation. This action requires a manual verification and approval process. The tender shall specify if the system has the possibility to manage each award separately depending on the value.
Minimum requirements of the account management:

− support of multiple currencies (HUF, EUR)
− keep, record and handle online the internal account
  separate A/R and A/P amounts for accounting analytics
  Receivable:
    recharging
    prizes
  Payable:
    collection of prize
    betting
− differentiate by payment source: prize, recharging or bonus
− management of prize payments (payment approval, recording paid prizes, differentiation and management of small and large prize categories)
− limit setting possibility (for period, game or internal account maximum) on the administration interface for players, groups and every player

2.3. **Bonus system**

The tender shall specify the bonus solutions managed by the system proposed.

2.4. **Recharging the internal account**

The tender shall specify the account recharging payment methods handled by the system and the possibilities to integrate other recharging methods.

If it is feasible in the new web-based system, Company would like to implement the recharging methods currently used in its existing web-based betting system.

1. Recharging with credit/debit card
   Recharging with a credit/debit card via a partner bank web interface.
2. Bank transfer
   Bank transfer to the Company's central account with a unique ID number.
   Loading the incoming transfers on a file level into the GSBS system.
3. From mobile account to internal account
   Transfer money from a mobile account to the internal account by integrating the payment solutions of mobile service provider.
4. Cash payment at the sales location with unique ID.
   This is Company's unique recharging method. The tender shall specify the interface solutions offered by the system and whether there is possibility for custom development.
5. Possibility for online payment methods (Moneybookers, Paypal, Neteller etc.).

2.5. **Required features of the gaming interface**

The tender shall specify the overall features of the gaming interface; upon user login at least the following possibilities shall be available:

2.5.1. **Personal data**

In this area the player shall be able to change his/her password and the least sensible data. Sensible registration data can only be changed with the help of the customer service (via phone or e-mail).
2.5.2. **Account log**

Account movements (recharging, betting, prizes, payments) can be queried and reviewed for at least 180 days. Transactions can be filtered by type.

2.5.3. **Placing Bets**

The player shall be able to bet if there is enough money on the account. If there is not enough money, the system shall notify the player and take him/her to the account recharge page (while maintaining the current bet).

Before entering the game, all bets shall be confirmed once more by the player, since there is no possibility to delete a confirmed bet afterwards.

Upon a successful betting, the system shall confirm to the user every detail of the game. The player shall be able to check the details in the Account log anytime for a period of 180 days after placing the bet.

The player cannot ask for a deletion of a confirmed game (bet).

2.5.4. **Information area**

- **News**
  - Current news, information
  - Entering news on the administration interface
- **Statistics**
  - Games and statistics of events with as much details as possible
  - Using databases from external service providers
- **Results**
  - Event results
  - Entering results on the administration interface
- **Contacts**
  - Customer service and other public contacts
- **Current betting program**
  - Loading from administration interface
- **Live score**
  - Using data from external service providers

2.6. **Base requirements for sports betting games**

The tender shall fully specify the sports betting games of the system together their features.

Required base features for sports betting games:
- unlimited concurrent events
- possibility to group the events (sport, championship, bidding, event day, favorites)
- indication of highlighted events and last minute betting
- live betting (detailed description of the handling logics is required)
- long bet (for weeks, months in advance)
- dynamic odds
- statistics
- administration interface for managing the program and news
- monitoring system to monitor the turnover and the risky bets
- organizer limits for events, outcomes, combinations and users
- possibility to set automatic limits

2.7. Claim and payment of prizes

Only that part of the internal account can be paid as prize that constitutes the amount won; the system displays this amount for the player. Non-prize part of the internal account can be withdrawn in exceptional cases only with approval from Company.

Players shall receive an ID for their bets generated in the central system by the organizer for every game played. Players shall be able to query their bets, prizes and their details up to date.

Small prizes are credited immediately to the players’ internal account. Big prizes are not credited to the internal account; the players shall identify themselves to withdraw these prizes. The organizer shall be able to set the thresholds of small and big prizes.

Regulations will be detailed by Company but the tender shall specify whether the system has the possibility to manage each prize separately depending on its value.

2.7.1. Payments to a bank account provided at registration

Money transfer is an existing solution at Company. Company collects the prize transfer claims daily and transfers the money for one or two contracted partner banks via a mutually developed channel. In this case, prizes may appear on the players’ bank account within normal bank transfer time (1-2 days). In case of an unsuccessful transfer the system shall be able to handle the returned money.

The system shall prompt for a password after the player has selected this payment method and indicated the amount to be transferred. If everything is all right, the transfer order is accepted, and the prize amount of the transfer order is deducted from the prize amount separated in player's the internal account. Transfer is completed via Company's electronic bank system with a grouped transfer file. A status file is generated of the results of transfers; GSBS shall handle the returned transfer items when processing the status file.

Players can request prize payment only above a set minimum threshold amount. This must be a system parameter.

2.7.2. Payments to an address provided at registration

Similarly to bank transfer, money order can be requested from within the electronic bank system which requires a valid mailing address instead of a bank account. Answer file shall be processed also.

2.8. Communication with the players

The tender shall specify the social functions of the system (e.g.: e-mail, system messages, chat, forum, questionnaire, newsletter, FAQ, Facebook, Twitter).

The page shall display editable informational and other texts.
2.9. Further general criteria

The new web-based gaming system shall be constantly expandable in terms of games, sales channels and new payment methods made available by technological developments. From the players' point of view it shall be a flexible, dynamically developing online gambling site that is 'state of the art'. In addition, strong emphasis shall be put on constant and safe operation since this is the only way to gain and maintain the players' confidence in the long run.

2.10. General legal requirements and provisions

Legal requirements for gambling organization are set out in the act XXXIV. of 1991 and in the order of the Ministry of Finance 32/2005 (X. 21.) issued for the implementation of the act. From these provisions, the regulations on organizing via means of telecommunication assets and systems are of special interest, as Company intends to implement a web-based system.

To ensure compliance with these provisions and issuing the required licenses, the National Tax and Custom Office operates a separate unit, called the Gaming Board (hereinafter GB).

Bearing in mind the regulations mentioned above and the practice of the GB the following can be generally required from telecommunications assets and system (e.g. internet platform):

1. the right to participate in a game shall unambiguously be identified;
2. special requirements need to be developed and applied on the secure storing a subsequent monitoring of gaming data;
3. results shall be determined with a secure, predefined method;
4. reliable and fast search for winners;
5. quick crediting of prizes;
6. players shall be duly informed on the site about the risks of using the internet;
7. providing the security of the players' personal data and other moral rights;
8. fulfillment of tax payment requirements prescribed by the law; calculation, record keeping and payment of income tax to be paid after the prizes;

The system assessed to fulfill the requirements above shall be auditable by an external company according to the GB provisions and the general guidelines of auditing (against external attacks or internal manipulation). It is Company's responsibility to have the audit performed; Company may delegate this task to a specialized enterprise.

3. Requirements of the central system

3.1. General requirements

- The system shall support multi-lingual user interface.
- The technology proposed shall provide a long-term solution for Company (both in terms of economy and technology).
- The technological background shall be customizable, reconfigurable to meet the requirements and possibilities of the informatics and the market (upgrades, versions, support, etc.).
- tenderer shall undertake the necessary training of the operators (it may be the Company itself or assigned partner companies).
- The technological operation shall be feasible in Company's current IT-center.
- Information generated by everyday operation shall be stored in a database (game parameters, user data, logs, bet data, accounting analytics).
– A real-time monitoring system is a must.
– Dynamic reconfiguration of a game or rules shall be handled in a flexible way.
– The internal information system shall dynamically adapt to the requirements, shall support ad hoc queries and their possible systemization (CRM functions).
– The system shall have CMS functions easily manageable by the Customer.
– Please specify the functioning of the affiliate feature.
– Every user and admin action shall be logged; modification-proof management of the log files shall be provided.
– The system shall provide uniform access security and hierarchically structured rights management for the operating company or its employees.
– The central system shall be able to manage future games even if these games are to be provided by third parties.
– The system shall be modular. It shall be expandable with settings module of new game types. Games centers shall contain the game's internal logic and structure.
– The central system shall have an interface with back office system connectivity. E.g.: Oracle Financial (accounting system), the current web-based and SMS betting system and other possible internal system of Company. The tender shall specify the accounting-related interface solutions offered by the system and whether there is a possibility for custom developments.
– The tender shall also specify the random generation method used for other online games (the tool used for the generation).
– Please make a list of the supported www browsers.
– The tender shall specify the free (or demo) games offered by the system.
– Is it possible to apply external (third-party) design elements?

3.2. Monitoring and report system

Tenderer shall propose additional tool(s) that provide(s) interface for the operator to monitor all system parameters to facilitate everyday operational tasks. The system shall include notification functions that notify the system administrator via e-mail or SMS in case of a malfunction.

The system proposed shall provide different reporting tools that support both the Company's and the GB's possibly rising monitoring requirements. The monitoring system shall operate in tandem, online, communicating with the central system but independently from the betting system:
– continuous monitoring of business and turnover data;
– continuously providing statistical data;
– continuous monitoring of transactions, capacities and workload.

At least the following information shall be monitored through the system:
– Prize report
– System status and performance report
– Financial activity summary report
– Transaction report per games
– Online sales report
– Per game report on financial activity
– Game status report
– Player login activity report
– Bet risk management
– Dynamic odds compilation (odds providing then uniform handling)
– Previously not defined reports and visual/audio alarms
– CRM functions
– Reports can be scheduled
– Web statistics

3.3. **Ability to customize game parameters through the central system**

– Set minimum base bet amount
  Each bet/game has unique base fee. A bet cannot be placed with a lower amount.

– Set maximum bet amount
  Per player:
  set daily or weekly limit; self-limiting possibilities

  Per game:
  the organizer may set a loss limit for specific outcomes
  maximum bet amounts for games

– in the case of bookmaker bet (fixed prize multiplier) the organizer may assign predefined prize multiplier for every winning outcome

4. **Informatics requirement of the gaming system (security, hardware, availability)**

4.1. **Hardware architecture requirements**

The system shall constitute of modern assets with high availability and fault tolerance and the supplier shall provide support for it. The network structure shall be designed so that the system is expandable in runtime; the system shall have appropriate load balancing. The system shall be able to handle multi-site system solutions, that is when part of a system is physically at a different location. Please specify the maximum distance between the sites. Scalability is imperative by the system design as it is hard to forecast the expected traffic and required capacities for a new system. The architecture shall support the possible runtime upgrade for base and game software versions; the proposal shall specify the applied solution.

The system shall come with a test system also that can be used to test every change, fix and upgrade made to the game and base software before going live and without affecting the live system; as a consequence the test system shall be as similar to the live system as possible.

4.2. **Base software requirements**

The operation system and database software on the system database and application machines shall be a reliable and fault tolerant type. (Suggested types: Windows and/or Linux and/or Unix or Oracle as Company has significant experience with them). It is a mandatory requirement that the system should use such software and versions for which the manufacturer support is guaranteed for a long period of time; security and other fixes are continuous and upgrade installations can be done.
4.3. **Performance requirements**

The system shall be able to serve 500,000 registered users or at least 10,000 concurrent users and at least 10 transactions per second. Tenderer shall indicate the bandwidth demand for accessing the system.

4.4. **Data management provisions and protection of personal data**

Records must be kept of player data. As a consequence, the company performs data management, an activity that can only be performed in accordance with the provisions of the Act LXIII. of 1992. The act declares that user approval is needed for the data management and the system shall provide security for this data (using the technology of the supplier); security includes data integrity and data confidentiality.

Data management shall provide data integrity. User and administrator activities shall be logged. Limited log accessibility must be provided. Non-current data and logs of the system shall be kept in archives.

Tenderer shall create the documentation for requesting the registration number for the data management; the documentation shall specify the data management method and the protection of the stored data.

4.5. **Rights management**

The system shall have a rights management that provides appropriate rights distribution for the user and administrator activities of the operator. Every user shall have multiple rights. Tenderer shall specify the proposed rights management on the file system, application and database levels.

Tenderer shall specify the following:
- In case of application-level rights, the rights owned by specific users within the system administration.
- The method to implement security between user levels.
- In case of database-level rights, the method how applications can access specific data.

4.6. **Logging requirements**

The system shall have an overall logging solution. Beside administrator activities and other user activities, the system shall collect and store log files created in the whole structure; these log files shall be made available for persons with appropriate rights.

4.7. **Monitoring system**

A monitoring system is required for the continuous monitoring of the system in which it is possible to check the proper function of the hardware and software components. The system shall include message sending functions and, after parameterization, it shall be used to send status and error reports to the system administrator in SMS and e-mail.

Please specify the proposed monitoring system in detail.

4.8. **Border protection**

Tenderer shall propose design for the following: DMZs for every direction and connection point; applied firewall type; their operation and position within the hardware structure.
Tenderer shall propose rules applied for border protection. The tender shall clearly specify whether the applied firewall solution is licensed.

The tender shall specify whether the system includes a solution for bandwidth management, intrusion detection and remote access (software, hardware).

4.9. **Backup strategy**

The system shall have backup, restore and disaster plan. Tenderer shall specify the backup solutions, tools and strategy of the proposed system and the methods for restoring from a backup.

The system shall enable full backup (databases, applications, border protection tools) for standard operation. The backups created with a backup plan and related restore plan shall always provide an ASAP full system restore. The document shall specify the time for the worst DRP (Disaster Recovery Plan) that may occur with a malfunction and whether there is a possibility of data loss.

4.10. **Archiving**

The supplied system shall have a backup or archive solution from which it is possible to find betting, prize or customer data up to a period of 10 years in case of request by authority. The system does not necessarily have to function online but archived data shall be made available within 1-2 days if needed.

The tender shall specify the technological and logical solution for finding data.

4.11. **Availability requirements**

The system shall operate 24/7. Tenderer shall hand in the tender for both 99.99% and 99.95% availabilities. Tenderer shall specify the MTBF (Mean Time Between Failure) value for the overall system and its components.

4.12. **Internal or external locks**

The data of the games, results and drawings shall be protected by internal and/or external locks against unauthorized modifications.

Tenderers are required submit solutions for such locks.

4.13. **Testing procedures**

Before going live it is necessary to perform load and process tests beside the base tests. The tender shall specify the steps required for these procedures.