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GOVERNOR

STATE OF MICHIGAN
MICHIGAN GAMING CONTROL BOARD
DETROIT

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TECHNICAL BULLETIN
No. 2020-01

DATE: August 6, 2020

TO: Internet gaming operators, sports betting operators, internet gaming platform providers, and internet sports betting platform providers

CC: GLI and BMM

FROM: Richard Kalm, Executive Director

SUBJECT: Technical specifications for geofencing and specific requirements

For discussion purposes only - pending approval of final rules

This technical bulletin applies to internet gaming conducted pursuant to the Lawful Internet Gaming Act (LIGA), 2019 PA 152, and internet sports betting conducted pursuant to the Lawful Sports Betting Act (LSBA), 2019 PA 149. Without limitation, the following are subject to this technical bulletin:

(1) Internet gaming operators and sports betting operators (operator or operators).
(2) Internet gaming platform providers and internet sports betting platform providers (platform provider or platform providers).
(3) Internet gaming platforms and internet sports betting platforms (platform or platforms).
(4) Internet gaming suppliers and sports betting suppliers (supplier or suppliers).
(5) Vendors registered under the LIGA and/or LSBA (vendor or vendors).
(6) Internet wagers and internet sports betting wagers (wager or wagers).
(7) Internet wagering accounts and internet sports betting accounts (account or accounts).

All internet wagering transactions conducted pursuant to the LIGA must be initiated and received or otherwise made by an authorized participant located in the state of Michigan. All internet sports betting transactions conducted pursuant to the LSBA must be initiated and received or otherwise made by an authorized participant located in the state of Michigan or, if the board authorizes multijurisdictional internet sports betting in accordance with the LSBA, another jurisdiction in the United States authorized by the multijurisdictional agreement.

An operator and its platform provider must utilize a geofencing system to reasonably detect the physical location of an individual or authorized participant attempting to access the platform and place a wager.

The geofencing system must ensure that any individual or authorized participant is located within the permitted boundary when placing any wager, and must be equipped to dynamically monitor the individual's or authorized participant's location and block unauthorized attempts to access the platform in order to place a wager throughout the duration of the authorized participant session.

Technical specifications and specific requirements for geofencing prescribed by the board are as follows:

(1) **Applicable Definitions**

(a) "Geofence" means, for the purpose of this technical bulletin, a virtual geographic perimeter defined by a Global Positioning System (GPS), Radio-frequency Identification (RFID), or other similar technology, which enables software to trigger a response when an individual's or authorized participant's device enters or leaves a predefined set of boundaries.

(b) "Geofencing System" means, for the purpose of this technical bulletin, a process to reasonably detect the geolocation of an individual or authorized participant when said individual or authorized participant is attempting to access the platform and place a wager.

(c) "Permitted boundary" means, for the purpose of this technical bulletin, the geographic boundaries of the state of Michigan, including Indian land located in the state of Michigan to the extent allowed by applicable state and federal law. For internet sports betting only, if the board authorizes multijurisdictional internet sports betting in accordance with the LSBA, the permitted boundary includes the geographic boundaries of any other jurisdiction in the United States authorized by a multijurisdictional agreement, subject to any limitations provided in the multijurisdictional agreement, any applicable state or federal law, or as otherwise prescribed by the board.

(2) **Technical Specifications**

Frequency of the System
To ensure an individual or authorized participant is located within the permitted boundary, the Geofencing System must be fully equipped to dynamically monitor the individual's or authorized participant's location and block unauthorized attempts to access the platform in order to place a wager throughout the duration of the authorized participant session.

The platform must trigger:

(a) A geolocation check prior to the placement of the first wager in the authorized participant session.

(b) Recurring periodic geolocation checks. If an authorized participant session is longer than a single wager, the recurring periodic geolocation check must be administered as follows:
    (i) Static connection: Recheck every twenty (20) minutes, or five (5) minutes if within one (1) mile of the border of the permitted boundary.
    (ii) Mobile connections: Recheck intervals to be based on an individual's or authorized participant's proximity to the border of the permitted boundary, with an assumed travel velocity of seventy (70) miles per hour and a maximum interval not exceeding twenty (20) minutes.

(c) The operator and platform provider must define the reasons for all trigger instances (e.g., single wager, deposit, etc.) and communicate the trigger reason using an anonymized user ID (i.e., no names or personal data collected) to the Geofencing System when requesting each geolocation check.

(d) A geolocation check must be conducted immediately upon the detection of a change of the individual's or authorized participant's internet protocol (IP) address.

(e) If the platform determines that an individual or authorized participant is located outside the permitted boundary, the individual or authorized participant must be provided limited access to the platform and to their account. The individual or authorized participant must also be prohibited from placing a wager until a geolocation re-check is performed and confirms the individual or authorized participant is located within the permitted boundary.

Location Data Accuracy

To ensure location data is accurate and reliable, the Geofencing System must:

(a) Utilize pinpointed and accurate location data sources to confirm the individual or authorized participant is located within the permitted boundary.
    (i) When a mobile carrier's data is used, the individual's or authorized participant's device (where the authorized participant session occurs) and the mobile carrier's data source (i.e., mobile device) must be in proximity to each other.

(b) Disregard IP location data for devices utilizing mobile internet (e.g., 3G, 4G, 5G, LTE) connections.

(c) Possess the ability to control whether the accuracy radius of the location data source is permitted to overlap or exceed defined buffer zones or the permitted boundary.

To mitigate and account for discrepancies between mapping sources and variances in geospatial data, and to ensure accuracy of locational data, the Geofencing System must:

(a) Utilize boundary polygons based on audited maps.

(b) Overlay location information onto these boundary polygons.

The geolocation method shall monitor and flag for investigation any wagers placed by a single account from geographically inconsistent locations during a single authorized participant session.

Location Data Integrity
To ensure the integrity of an individual's or authorized participant's location data, the Geofencing System must:

(a) Detect and block any locational data fraud, including but not limited to proxy servers, fake location applications, virtual machines, remote desktop programs, etc.

(b) Utilize detection and blocking mechanisms verifiable to a source code level.

(c) Follow best practice security measures to stop "man in the middle" attacks and prevent code manipulation such as replay attacks.

Device Integrity
To ensure the integrity of any device used by an individual or authorized participant, the Geofencing System must detect and block non-secure devices and those which indicate any system-level tampering (e.g., rooting, jailbreaking, etc.).

Authorized Participant Integrity
To ensure the integrity of an individual or authorized participant, the Geofencing System must detect and flag for investigation any individuals or authorized participants who make repeated unauthorized attempts to access the platform.

Reporting and Analytics
All location fraud must be assessed on a single geolocation check, as well as on a cumulative basis of an individual's or authorized participant's history over time. The Geofencing System must:

(a) Display the specific and real-time data feed of all geolocation checks and potential fraud risks.

(b) Offer an alert system to identify unauthorized or improper access.

(c) Facilitate routine, reoccurring delivery of supplemental fraud reports that pertain to the following:
    (i) Suspicious or unusual activities.
    (ii) Account sharing.
    (iii) Malicious devices.
    (iv) Other high-risk transactional data.

System Maintenance
To verify the overall integrity of the Geofencing System, it must:

(a) Be reviewed regularly to assess and measure its continued ability to detect and mitigate existing and emerging location fraud risks.

(b) Undergo frequent updates, at least one every three months, to maintain cutting-edge data collection, device compatibility, and fraud prevention capabilities.

(c) Utilize databases (IP, proxy, fraud, etc.) that are updated daily, at a minimum, and are not open source.

(3) **Geolocation Error Messages to Individuals and Authorized Participants**

The operator and its platform provider must implement a delivery mechanism to send a message to an individual or authorized participant to notify the user of a geolocation failure. The following messages are approved for use within the listed triggering events:

A Geolocation Result Exceeds a Board Approved Threshold, or Insufficient Geolocation is Obtained for the Individual or Authorized Participant:
"We are unable to confirm that you are located within the permitted boundary, a legal requirement for [internet gaming OR internet sports betting] to take place. This appears to be a technical problem and we kindly ask for you to contact our customer service department to help you resolve this problem."

The Geofencing System has Detected Potential Location Fraud:
"We have detected that you might be accessing the [internet gaming platform OR internet sports betting platform] through an unauthorized proxy, VPN, or other service which provides the ability to misrepresent the geographic location of a computer or mobile device. While your use of this service might be inadvertent, we are not able to confirm your location within the permitted boundary, a legal requirement for [internet gaming OR internet sports betting] to take place."

Software is Found Running on the Individual's or Authorized Participant's Device Which Could be Used to Circumvent Geolocation:
"It appears your device is running software which might be utilized to bypass our geolocation checks. While your use of this software might be inadvertent, we are not able to confirm your location within the permitted boundary, a legal requirement for [internet gaming OR internet sports betting] to take place. We ask that you please contact our customer service department so we can assist you in resolving this problem."

Not Enough Location Data or Data Accuracy is Low (Desktop PC/MAC):
"We are unable to verify that you are located within the permitted boundary, a legal requirement for [internet gaming OR internet sports betting] to take place. To help us verify your location, make sure your WiFi is turned on and there are multiple WiFi

connections that are within range of your device. We ask that you please address these items and try again."

Not Enough Location Data or Data Accuracy is Low (Mobile Device):
"We are unable to verify that you are located within the permitted boundary, a legal requirement for [internet gaming OR internet sports betting] to take place. To help us verify your location, make sure your Location Services in your device are turned on and there are multiple WiFi connections that are within range of your device. We ask that you please address these items and try again."

IP Address Located Outside the Permitted Boundary:
"Your IP address indicates that you are not within the permitted boundary, a legal requirement for [internet gaming OR internet sports betting] to take place. Please make sure that you are within a permitted boundary and try again."

Too Close to Border of Another State or Country:
"You appear to be close to a border area. Due to this, we are unable to verify that you are located within the permitted boundary, a legal requirement for [internet gaming OR internet sports betting] to take place. To help us verify your location, make sure your WiFi is turned on and there are multiple WiFi connections that are within range of your device. We ask that you please address these items and try again."

Running IP Anonymizer:
"For security purposes, you are required to turn off your VPNs, proxies, and IP anonymizers. Please address these items and try again."

Proxy Detected:
"For security purposes, you are required to turn off proxies. Please disable and try again."

Not on the Latest Required Version of Geolocation Software:
"For security purposes, we need to verify your location using the latest software release. Please update to the latest version and try again."

Location Jumpers/Account Sharing and Advanced Fraud:
"For security purposes, your [internet wagering account OR internet sports betting account] has been flagged for potential location fraud. Please be aware that it is illegal to place an [internet wager OR internet sports betting wager] from outside the permitted boundary. We may unflag your [internet wagering account OR internet sports betting account] if our fraud team determines this activity was inadvertent."

Remote Desktop Software Detected:
"For security purposes, you are required to disable prohibited remote desktop software. Please disable all prohibited remote desktop software and try again."

Mobile Device Tampering Detected:
"For security purposes, you are required to wager from a device that has not been rooted or jailbroken and is not subject to location tampering tools. Please use a different device to continue and discontinue the future use of such tools."

Notwithstanding the minimum standards established in this technical bulletin, an operator or platform provider must employ reasonable efforts to ensure it meets or exceeds current industry-recognized geofencing standards. The board reserves the right to reassess or clarify the standards established in this technical bulletin at any time in response to a legal interpretation, to include additional standards the board deems appropriate, to adjust to changes in technology, relevant standards, or platform design, or for any other reason necessary to regulate internet gaming under the LIGA or internet sports betting under the LSBA.

If you have any questions regarding this technical bulletin, please contact David Hicks at hicksd8@michigan.gov or (517) 241-1659.