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GOVERNOR

STATE OF MICHIGAN
MICHIGAN GAMING CONTROL BOARD
DETROIT

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TECHNICAL BULLETIN
No. 2020-02

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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: Geofencing technical specifications field testing 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).

The board seeks to create additional accountability for ensuring compliance with the geofencing technical specifications issued in technical bulletin 2020-01. Maintaining the integrity of the geofencing system is an ongoing responsibility for each operator and platform provider which may be subject to an operational audit conducted by the board. Operators and platform providers must perform field testing of their platforms, which include the geofencing system, prior to launching internet gaming or internet sports betting operations. Operators and platform providers may utilize an independent testing laboratory approved by the board to perform field testing.

Geofencing Field Testing Requirements

- (1) Successfully complete a test of the geolocation process by attempting to place a wager as follows:
 - (a) From a minimum of ten (10) locations outside state of Michigan boundaries. At a minimum, five (5) of these locations must be within one mile of the Michigan border.
 - (b) From a minimum of ten (10) locations within state of Michigan boundaries. At a minimum, five (5) of these locations must be within one mile of the Michigan border.
 - (c) A minimum of five (5) tests must be conducted where the tester crosses various locations along the Michigan border during an authorized participant session.
- (2) For all location testing conducted, the re-check frequency must also be tested to ensure compliance with the board's geofencing technical specifications.
- (3) Testing must further include confirmation that a geolocation check occurs immediately upon a change of IP address to ensure that proper geolocation checks continue throughout the authorized participant session, as required by the board's geofencing technical specifications.
- (4) Testing must include both static and mobile connections.
- (5) Testing must be done on all device types, using the most popular versions available.
- (6) The testing locations selected must be provided to the board.

Conduct of Testing and Testing Reporting

Operators and platform providers must receive board approval of their field testing plan prior to field testing performance. The field testing plan must outline how the testing will be completed and the entity that will conduct the required testing. Although an independent testing laboratory approved by the board might be approved to conduct the required tests, this will not require an amendment or resubmission of a GLI-19 or GLI-33 certification that has been issued.

A Pass/Fail scoresheet which depicts all locations tested and the result of each location test shall be provided to the board. If additional locations are tested, results must also be reported. Any failures on the out-of-state locations will result in an overall failure to meet the board's geofencing technical specifications and this technical bulletin. Additionally, a completed field test report must be submitted which includes screenshots of the application displayed to the individual or authorized participant and a screenshot of a Google map identifying the location where the transactions originated. Moreover, the operating system version, device type, and a brief explanation of the test case(s) must also be included in the report.

If any of the aforementioned tests have already taken place, the operator and platform provider shall provide the specific test information (e.g., when the test took place, what entity conducted the testing, and the results). The board will determine if any retesting will be required.

Additional Guidance Regarding “Man in the Middle” Attacks and Code Manipulation

The board’s geofencing technical specifications provide that the geofencing system must follow best practice security measures to stop “man in the middle” attacks and prevent code manipulation such as replay attacks. To ensure these vulnerabilities are addressed, an independent testing laboratory approved by the board shall perform testing to confirm that the platform prevents both replay attacks and individual or authorized participant device tampering of location data when evaluating the platform for use in Michigan under the LIGA or LSBA.

The independent testing laboratory approved by the board must provide the board with written proof that the platform was tested against and successfully prevented at least two (2) potential replay attack scenarios. The first being a form of network attack where a valid data transmission, in this case a positive geolocation check, is captured and maliciously or fraudulently injected in place of a subsequent check allowing an individual or authorized participant to place a wager from outside the permitted boundary. Second, the test must conclude there are sufficient measures in place to prevent potential modification or tampering of the individual or authorized participant device side response that is received by the platform.

Multijurisdictional Internet Sports Betting

For internet sports betting only, if the board authorizes multijurisdictional internet sports betting in accordance with the LSBA, the testing and reporting required in this technical bulletin must be performed relative to each of the other jurisdictions in the United States authorized by a multijurisdictional agreement. Such testing must be performed before an operator or platform provider can launch internet sports betting operations in each of the other jurisdictions authorized by the multijurisdictional agreement.

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 field testing 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.