

WHAT IS A GAMBLING DATA VAULT?

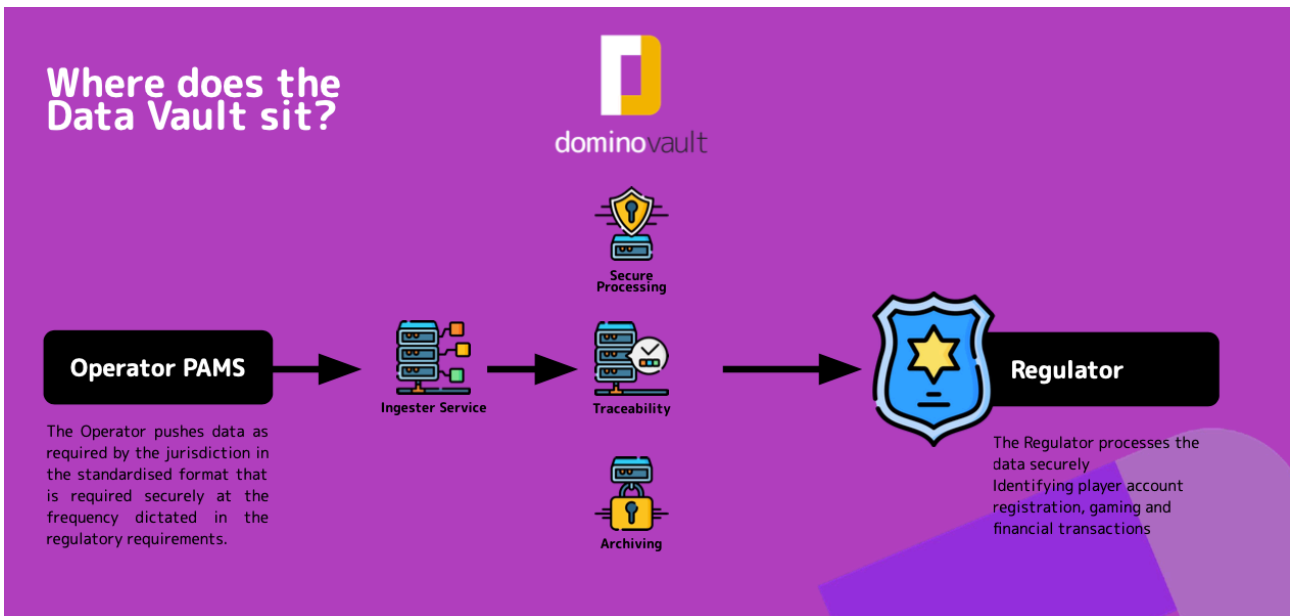
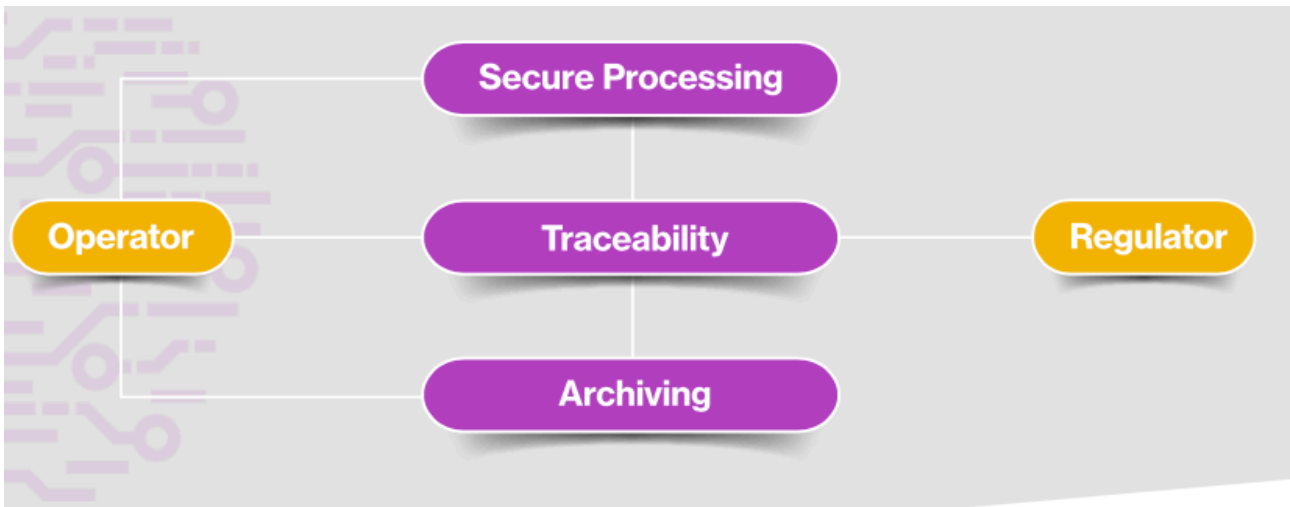
- **How does it work?**
- **What is involved?**
- **What other countries have a data vault?**

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Question on notice: 28 March 2023 (revised 21 June 2023)

Inquiry into online gambling and its impacts on those experiencing gambling harm (Standing Committee on Social Policy and Legal Affairs)



Source: [Domino Vault a product of Pretty Technical](#)

“The evaluation system serves the competent gambling authority as a tool for monitoring the activities of gambling providers. For this purpose, the gambling providers are obliged to collect all necessary data correctly. The data is collected independently by the gambling providers on so-called safe servers, which must be set up and operated by the gambling providers at their own expense. The evaluation system regularly accesses the safe servers and downloads the data for processing. In addition to the technical requirements for the safe servers, the technical requirements for the safe servers and their interfaces are specified in the “Technical Guideline for the Safe Servers” are required and in which structure they must be stored by the gambling providers on the safe servers.

Germany’s new system for ‘Safe Servers’¹

¹ <https://www.gluecksspiel-behoerde.de/de/aufsichtssysteme/auswertesystem-safe-server>

What is a data vault? (Also called a data safe, or safe server)

A gambling data vault is a mechanism used by gambling regulators and other government authorities to capture data from their licensed gambling operators.

They typically record every betting transaction placed in that country. They generally comprise of a 'data capture' and a 'data storage' system.

Operators are responsible for securely storing their data and providing access to the regulator, with appropriate security and privacy measures in place. Generally, once the data is in the 'vault' operators cannot change it.

The regulator's system pulls data from each operator's vault (or the operator's safe server pushes data out to the regulator). The regulator's database combines the data to have both an individual operator view as well as a whole of market view. The regulator can also access an individual customer view to fulfil its regulatory functions, e.g. if there is a complaint or it is conducting investigations on an operator's compliance with its responsible gambling obligations.

Individual customers may be de-identified and assigned an unique reference number (although some regulators choose to see all data).

Some uses of the data vault.

Having real-time gambling data is a hugely powerful resource for gambling harm prevention and other uses.

Gambling regulator

- Data to inform harm prevention policy measures
- Market size data
- Identify deposits/withdrawals with AML risks
- Identify deposits/withdrawals and player patterns with customer harm risks
- Self-exclusion monitoring
- Spend caps monitoring (Germany has introduced a single player view limit)
- Operator comparison on performance indicators (e.g percentage of customers in high risk category)
- 'Operator investigations'
- Integrity of Sports/betting investigations

Taxation authorities

- Various taxes levied on the industry

Anti-Money Laundering/Fraud prevention

- Identify deposits/withdrawals with AML risks

Public Health Gambling Researchers

- Access de-identified data for harm prevention gambling research

Which gambling regulators have a data vault? (15 countries)

At least 15 countries already have a legislated requirement for its licensed gambling operators to provide the regulator with access to a 'data vault':

Europe: Spain (Internal Control System, 'SCI'²), France, Denmark, Portugal, Greece, Germany, Netherlands, Malta, Romania, Poland, Bulgaria

Central/South America: Columbia, Argentina (and Brazil is currently looking at the Portuguese model).

I believe that the most established country is Spain (who implemented its data vault in about 2012), and then Denmark and France.

To see some of the publicly available data ([Power BI database](#))

Spain: there are numerous interactive data reports. Examples include:

- <https://www.ordenacionjuego.es/en/informe-jugador-online> (e.g. the online gambler profile has an interactive report. The Annual Report Index has a breakdown of gambling marketing spend.

Denmark:

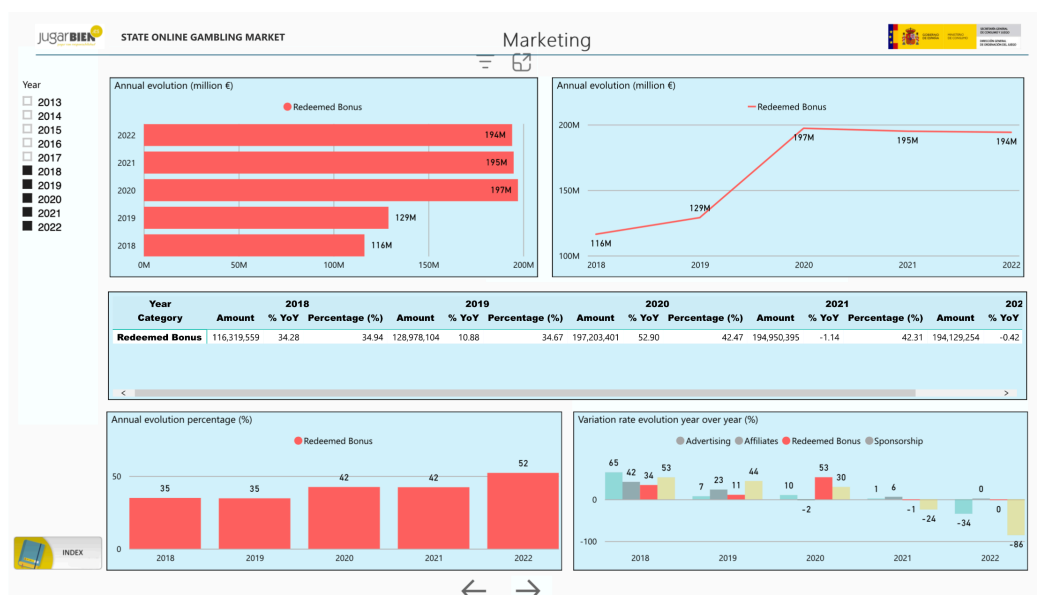
- <https://www.spillemyndigheden.dk/en/statistik/statistik-det-danske-spilmarked>

What sort of data can be made available? Some examples

The possibilities are limitless.

Within a few minutes of looking at Spain's Powerbase BI interface, I found advertising spend and selected the past five years. Using the interactive tools, I selected 'advertising' and 'sponsorship'—these were severely curtailed in 2022. I then observed that 'redeemed bonuses' (ie inducements) and affiliate advertising spend increased. This makes an argument for gambling policy to capture an even broader gambling marketing spend, by capturing affiliate advertising and stopping gambling inducements.

The level of detail available to policy makers is excellent.



² See Chapter 5 of

'R_20141006_especificacion_tecnica_juego_trazabilidad_seguridad_sistemas_tecnicos_new_txt_consolidado_en.pdf (Resolución technical specifications for gambling, traceability and security NEW CONSOLIDATED TEXT (of mandatory application from March 30, 2019) at <https://www.ordenacionjuego.es/en/homologacion-sistemas-tecnicos>

I recommend having a wander through Spain's interactive data portal. Click on items to drill down or see the graphs re-worked.

The screenshot shows the website ordenacionjuego.es. The browser address bar and the language selection menu (Español, Català, Galego, Euzerara, English) are circled in red. The main navigation bar includes: Home, About us, Regulations, Compliance and enforcement, Institutional relations, Studies, reports and presentations, Conventions and agreements, and Gambling Policy Council. The central content area features a 'Report of online gamblers' section with a Microsoft Power BI viewer showing a report titled 'Online gambler profile 2021'. A sidebar on the left lists various services and reports, with a red arrow pointing to 'Analysis of the profile of online gamblers'. A sidebar on the right contains links to 'Agenda', 'Licensed operators', 'Complaints and Claims', 'Self-prohibition', 'Responsible Gambling', 'FAQ Frequently questions', and a card with playing cards.

ordenacionjuego.es (Spain's gambling regulator)

This screenshot shows the browser address bar for ordenacionjuego.es and a row of navigation icons including Mercad..., BNM, and other site-specific symbols.

The screenshot shows the 'Annual report Index' page. It features a central title 'Annual report Index' and two columns of navigation buttons. The left column includes: 'Methodology', 'ANNUAL EVOLUTION', 'MAIN FIGURES', 'ACTIVE ACCOUNTS AND NEW ACCOUNTS', and 'MARKETING'. The right column includes: 'Annual summary', 'GGR BY GAME', 'PERCENTAGE BY GAME', 'BETTING', 'BINGO', and 'CASINO'. The page also displays the 'juego seguro' logo, the 'jugarBIEN.es' logo, and the flags of Spain and the United Kingdom.

What does the data vault involve to set up and run?

Setting up the data vault would require a significant initial effort as the regulator has to identify what it wants to achieve and the data sets required. There needs to be a testing regime in place.

However, a number of the countries I looked at have their specification and other documents publicly available on the internet in English, so Australia could start off by looking at what has been done overseas. It could model Australia's solution on one of the existing overseas models.

One supplier told me that it didn't believe that it was overly costly for the regulators to receive all this data, as they are getting all the data in a format that they have already defined.

PowerBI appears to be the front end portal used by some of the regulators: eg Denmark and Spain present their data using PowerBI.

- Link to Denmark's gambling regulator's PowerBI public data reporting: <https://app.powerbi.com/view?r=eyJrJoiODZiNTcyNGMtYmQwNy00MjY0LTliOTktM2MxMzU0MmM1YjkyliwidCI6IjIOTNmMGVklWZmMzYtNDZkNC05Y2U2LWUwZDkwMjA1MGNmNSIsImMiOj9>

Sample specifications and other technical guidelines (Germany, Netherlands, Spain, Denmark)

Spain's system is the most established having been operational for almost 12 years. Denmark's system appears to have started in 2018 so is also well established.

Germany and Netherlands are the newest data vault participants, and have set their systems up for:

- Consumer harm prevention (operator investigations, called 'supervision')
- Preventing AML/fraud
- Tax compliance (Netherlands), Germany??)
- Compatibility with their regulator run self-exclusion registers

Operators have to demonstrate that their data safe works, and that test data has been correctly uploaded. Their systems have to be audited by 3rd parties. All this has to be in place before licenses are given.

Germany: the new national gambling regulator is starting in May 2023. Its regulatory preparations started in 2021 and operators have to connect their systems to the regulator's systems in various ways, including:

- 'player lock' (OASIS) has two systems:
 - SAFE servers Evaluation system (6i para. 2 GlüStV 2021), which evaluates the data collected by the gambling providers themselves for 'gambling supervision', and
 - National deposit limits: Central files that control the players' compliance with the deposit limit (limit file - § 6c GlüStV 2021) as well as prevent parallel gambling with several gambling providers (activity file - § 6h GlüStV 2021). Germany has a national deposit limit cap of €1000 a month, across all operators and all forms of gambling.

See the items in the 'supervisory system's tab. It contains all the information required by the new national regulator. The system is called LUGAS. See <https://www.gluecksspiel-behoerde.de/de/aufsichtssysteme/technische-richtlinien-und-zugang-zum-testsystem-des-laenderuebergreifenden-gluecksspielaufsichtssystem-lugas>. Click on the google translate function, in the top right of the URL for an English version.

Both information technology systems have been operational since 1. January 2023 managed by the Joint Gambling Authority of the Länder **and operated by Dataport**, as a service provider of the public administration of the state of Saxony-Anhalt.

Netherlands: ‘Control Database’ (CDH): see documents on the internet. This was set up in 2020-2022.

Pursuant to Article 5.3 of the Koa Decree, a provider of remote games of chance maintains a control database. This control database must be set up in accordance with the “Specifications for the remote gambling data safe” and the “Data Model for the remote gambling data safe” published on the website www.kansspelautoriteit.nl/inrichten-cdb

- Specifications for the remote gambling data safe (the CDB), Version 1.00, 17 November 2020
- Data model for the remote gambling data safe (the CDB), Version 1.1 (amendments to 1.01 highlighted) 19 April 2022
- Data model for the remote gambling data safe (the CDB, Version 0.90, Date 19 May 2020, Status Draft – EC notification)

https://www.interxion.com/sites/default/files/2020-08/Interxion_Whitepaper_Entereng-Dutch-iGaming-Market.pdf

The legal framework will provide for strict provisions regarding reporting to the Dutch Gambling Authority by the license holder so that the Dutch Gambling Authority can exercise its supervisory powers. One way for the Dutch Gambling Authority to do this will be via the CDB. The CDB will comprise a vault where data will be stored that is relevant for supervision (“Data Vault”).

Data in the CDB

The data that must be included in the CDB will relate to payment transactions, changes in gaming accounts, overruns of the player profiles, and the application of intervention measures. The data will have to be stored near real-time and may not be overwritten. The data will be privacy sensitive, the reason why only pseudonymised data will be stored. Thereto the data will be linked to a unique indication that cannot be directly traced to the identity of the player. If there is reason to do so, for example, because an analysis of the data in the CDB has led to suspicion of fraud, the Dutch Gambling Authority will however have the power to force the license holder to reveal the identity behind the unique indication.

Spain: see chapter 5 of this document: Resolución technical specifications for gambling, traceability and security NEW CONSOLIDATED TEXT (of mandatory application from March 30, 2019) at <https://www.ordenacionjuego.es/en/homologacion-sistemas-tecnicos> (translate to English using ‘En’ button at top right). This was set up in 2011-12.

Denmark: SAFE

- See General Technical requirements on <https://www.spillemyndigheden.dk/en/online-casino#general-technical-requirements>, including/
 - [Technical requirements – online casino and betting](#) (Version 2.3) (Denmark technical requirements notification_final_2020_141_DK_EN_4)³
- 7.2.3 Control of gambling data
Annex 1 to the Executive Orders requires the establishment of **SAFE** and use of the **Tamper Token**. In

³ [https://www.spillemyndigheden.dk/uploads/2021-04/Technical requirements online casino and betting 2.3 - WT.pdf](https://www.spillemyndigheden.dk/uploads/2021-04/Technical_requirements_online_casino_and_betting_2.3_-_WT.pdf)

addition, operators who provide games online must be linked up to the Danish Gambling Authority's register of self-excluded players (**ROFUS**).

SAFE is the licensee's own data storage system (a file server) where you are required to store data - in accordance with standard records - for all the games provided. All licensees are required to establish at least one SAFE system. It must be possible for the Danish Gambling Authority to get online access to the licensee's data storage.

Tamper Token is a security system which ensures that the data saved by the licensee in the SAFE system remains unchanged in storage. Tamper Token is implemented in the Danish Gambling Authority's system and deals with:

- Creation of keys (tokens) used for the creation of identification codes.
- Storage of identification codes for later control.
- Ongoing control to check that the fixed time period for terminating tokens is observed.
- Verification that a retrieved series of data has not been changed in relation to the identification code received.

Is there a consistent data vault model across countries?

No, each country decides what data they want to capture or monitor, and the frequency, i.e. whether it is close to real time or has a lag. Each country decides what they want to use the data for. The use case may include harm prevention, anti-money laundering checks, and for taxation compliance checks.

Why do the operators comply?

It is a condition of the gambling license that operators have to provide the data, and demonstrate that their system complies with the requirements. There are independent certifiers who provide a certification of compliance.

In newly regulated online gambling markets, like Germany and Netherlands, the operators cannot start until they have shown that their systems comply, have been tested and independently certified.

How do operators comply with so many different markets?

There are third party companies that provide these data solutions designed specifically for compliance with the gambling data vault specification. The third party might for example supply either the source code or a complete data packaging solution.

So the operators don't need to 'invent the wheel' themselves. However, they can of course design their own system generally as long as it has been tested and approved by a qualified testing laboratory.

Generally, the regulator places the obligation to comply on the operator. There is some variation between operators.

Some third party companies providing data vault solutions: (this is not an endorsement)

- Domino
- Idemia: <https://www.idemia.com/news/idemias-online-gaming-vault-certified-national-cybersecurity-agency-france-anssi-2021-07-20>
- Maxima Compliance: <https://maximacompliance.com/>

What about security and data privacy?

Europe has strict EU GDPR rules that must be complied with. Some countries require data to be de-identified using a unique player ID code, but no names (eg Netherlands). Others like Spain retain identifying information. It depends on the use that the data vault was set up to meet. Some countries tax gambling winnings.

Some countries require the server to be stored in their country.

Data has to meet encryption standards. There are strict protocol for security.

Data vaults and harm prevention

One of the strong use cases is for preventing harm to customers, and the regulator being able to monitor the harm and the operator's actions to prevent harm.

Preventing fraud and criminal money entering gambling is also a way to prevent consumer harm. When people steal money, this harms innocent victims of the crime, as well as the person gambling and their families. So utilising AML obligations can end up as a powerful tool for consumer harm prevention (in some cases).

Research Opportunities for harm prevention

De-identified data will provide a rich source of data for reputable public health researchers. As data can be used for good and not so good ends, there should be some control over who the data is shared with.

Which Australian licensed operators are already complying with OS data vaults?

From checking operator websites and regulator listings of their licensed operators, it is apparent that Australia's large international operators, Entain (Ladbrokes), Flutter (Sportsbet) and Hillside (Bet365) are all meeting overseas data vault requirements for subsidiaries in their corporate group. This is not a complete listing.

Entain <https://entaingroup.com/about/business-overview/our-brands/>

- states that it operates in Spain France and Denmark: *'Bwin is one of Europe's leading online betting brands and is synonymous with sports. It has leading positions in several markets including Germany, Belgium, France, Italy and Spain.*
- *In addition to Entain's consumer-facing brands, the Group provides B2B services to a number of leading gaming operators including: Danske Spil the state owned operator that offers online gaming and PMU the French betting operator to whom the Group provides online poker services.*

Flutter: see its international gaming licenses in each market <https://www.flutter.com/media/w2qgex32/flutter-international-gaming-licences.pdf>

SPAIN

These are all the licensed operators in Spain from the Government website <https://www.ordenacionjuego.es/en/url-operadores>

Licensed operators in Spain include:

- Betfair and Pokerstars (Flutter),
- Bet365 (Hillside),
- William Hill (no longer in Australia)
- Bwin (Entain)

FRANCE

Licensed operators in France include:

- Entain's Bwin company
- Flutter's REEL company (REEL Malta)

DENMARK

Licensed operators in Denmark include: https://www.spillemyndigheden.dk/en/licence-holders?field_license_type_target_id=All&populate=&page=4

- REEL/Pokerstars & Betfair (owned by Flutter)
- Kindred/Unibet (Unibet in Australia)
- Bet365 (Hillside)

GERMANY

Licensed operators in Germany include: https://www.gluecksspiel-behoerde.de/images/pdf/whitelist_aktuell/20230403%20White%20List%20GGL.pdf

- Betway
- Ladbrokes, Sportingbet & Bwin (Entain)
- Hillside (bet365)
- Reel (Flutter)