

DATA PROTECTION DECLARATION TIMSS 2027 STUDENT DATA

The information provided below applies to TIMSS 2027 data

Identity and contact details of controllers:

Educational Research Centre (hereinafter “ERC”)

DCU St Patrick’s Campus

Drumcondra Road Upper

Dublin 9

D09 AN2F

Ireland

Telephone: +353 1 837 3789

Email: timss.ireland@erc.ie

and

Stichting I.E.A. Secretariaat Nederland (hereinafter “IEA”)

Keizersgracht 311

1016 EE Amsterdam

The Netherlands

Telephone: +31 20 625 3625

Email: secretariat@iea.nl

The ERC and IEA have concluded a joint controller agreement, which regulates their respective roles and responsibilities in the processing of personal data.

Data Protection Officer

The ERC’s Data Protection Officer can be reached at: data.protection@erc.ie

IEA’s Data Protection Officer can be reached at: dataprotection@iea.nl

For which purpose are data collected and processed?

The data collected during the Trends in International Mathematics and Science Study (TIMSS) 2027 is used exclusively for scientific research purposes. TIMSS is an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA).

The Educational Research Centre (ERC) is administering TIMSS in Ireland at the request of, and on behalf of, the Department of Education and Youth. This is in accordance with one of the functions set out in the ERC’s Establishment Order as a statutory body (which can be viewed in full at: <http://www.irishstatutebook.ie/eli/2015/si/392/made/en/print>). The ERC’s legal basis for processing personal data as per GDPR (Article 6).

Which information is requested?

The students in the selected TIMSS classes are invited to complete the TIMSS 2027 assessment in order to provide the study with information about students’ achievement in mathematics and science.

The students in the participating TIMSS classes are further asked to complete the TIMSS 2027 Student Context Questionnaire in order to provide the study with information about

students' gender, age, month, year, country of birth, the country of birth of their parents/guardians (for Second Year students only), highest level of education of parents/guardians (for Second Year students only), home resources, language(s) spoken at home, and opinions regarding the school environment and mathematics and science lessons.

- In order to ensure that TIMSS is based on scientifically selected samples of students and schools, selected schools are expected to co-operate with the administration of TIMSS where requested to do so (Department of Education Circular 0025/2012).
- Students will not be disadvantaged in any way by non-completion of the questionnaire, and respondents are permitted to skip individual questions or to discontinue answering the questions at any time.
- By filling in and returning a completed questionnaire, a study participant is agreeing to the collection and processing of their data within the questionnaire.
- Withdrawal of agreement to the processing of data without stating any reason can be made by any participant up to 4 weeks after the tests have been administered.
- Any participant who wants to remove or amend their information can contact the ERC (at +353 1 837 3789 or timss.ireland@erc.ie). If an individual withdraws from the study no additional data will be collected for that individual. Some information on withdrawals and exclusions is retained to validate the sample and to inform future administrations (e.g., to see if girls are more likely to withdraw from participation in the study).

Queries related to how personal information is protected can be directed to the ERC's Data Protection Officer (data.protection@erc.ie).

What kind of data are collected?

Data from answers to questions provided by a student who participates in TIMSS 2027 are collected and stored.

This is in the form of numbers representing selections (for example, a multiple-choice question), or values (for example, a figure for number of students in the target grade). Data are saved electronically in the format of raw data. Furthermore, TIMSS 2027 collects achievement data from participating students in the form of numbers representing selections (for example, a multiple-choice question), or text (for example, a direct answer to a question or drawings to a question). This information is also transformed into electronically saved scored data, i.e., their numeric equivalent.

All Login Sheets, including blank sheets, will be collected after the assessment to explore the types of rough work students produce during TIMSS and whether this provides insights into their approach to the assessment.

The achievement data is stored by RM and IEA.

As TIMSS 2027 student context questionnaires are administered electronically, there is information stored regarding login time and device information (for each login), answers and answer history for each question including timestamps and whether or not the questionnaire has been submitted. In addition, the following log data is captured: all navigation events; each click on a checkbox/radio button; each selection in a drop-down; focus (putting the cursor into the box) and blur (putting the cursor outside the box).

As Ireland implements the TIMSS 2027 assessment electronically (using IEA's StudyExpert and RM Assessment Master), the software collects and stores different types of data depending on how students interact with it.

Three general types of data are gathered: Raw response data (1), process-related event data (2), and system data (3).

Raw response data (1) are collected and stored during data collection. In a subsequent data processing step, they are converted into their numeric equivalent, the scored data.

In addition to the response data, during the assessment process-related event (2) and system data (3) are collected with the corresponding timestamps.

The process-related event data (2) storage includes the storage of login details, i.e., the time of login, logout or timeout to assessment parts, navigation events, and use of tools.

Event data (2) are logged together with the raw response data (1) and after conversion, event and log data are part of the set of data that allows IEA to analyse the way that students interact with the assessment.

The Assessment Master further collects system data (3), i.e., the browser version. These are stored so IEA can check that the assessment was carried out under suitable viewing conditions.

The information collected from the participants cannot, in and of itself, be used to identify individual respondents by name. An international ID system is used to uniquely identify each respondent (school principals, teachers, parents, students). The respondent names are collected by the ERC. However, respondent names are not shared with IEA or any other third parties. IEA provides the ERC with software and all necessary information enabling the ERC to submit pseudonymised data.

Where, how, and for how long are data from TIMSS stored?

TIMSS 2027 data are stored securely in a pseudonymous form, that is, processed in such a manner that the personal data can no longer be attributed to a specific data subject without the use of additional information (any such additional information is kept separately and subject to technical and organisational measures to ensure that the personal data are not attributed to an identified or identifiable natural person). This data cannot be accessed by any external persons or systems. Moreover, any ERC or IEA employees who access the data for processing have been suitably briefed on what constitutes an acceptable treatment of data and have signed a confidentiality agreement.

The data are stored as follows:

Response data are stored indefinitely so that they remain available for analyses. These responses eventually result in a database that allows researchers to compare education systems worldwide (see public accessibility below).

1) Field Test student achievement data (RM Education Limited) is collected and stored (including backups) on AWS server in EU. For the Main Data Collection, student achievement data (RM Education Limited) is collected and stored (including backups) on Microsoft Azure server in EU.

2) Questionnaire data (IEA) are collected and stored (including backups) on AWS servers hosted in the EU. The IEA SharePoint server where WinW3S data and data from paper instruments is uploaded by countries is hosted by Microsoft within the EU.

The achievement data is stored by RM and IEA.

The Login Sheets are securely stored at the ERC and confidentially destroyed within one year.

All data arriving for data processing are submitted in a pseudonymised form, i.e., without respondent names—only using a random, international ID system.

With whom and how are data from TIMSS shared?

IEA subcontracts the international implementation of TIMSS 2027 to the International Study Center (ISC) based at Boston College, USA, hereinafter ISC. IEA shares the pseudonymised data with the ISC via a secure SharePoint server. The ISC analyses the collected TIMSS 2027 data and produces the International Report. Employees of the ISC who access the data for analyses have signed a confidentiality agreement.

IEA has performed the required Data Transfer Impact Assessment for transfer of personal data outside of the European Economic Area. IEA relies on EC Standard Contractual Clauses (Module II: Controller to Processor) for transferring pseudonymised personal data to the USA.

The ISC shares the pseudonymised data with RTI for the purpose of school sampling. RTI is an authorised sub-processor in the USA. IEA transfers the data using a secure SharePoint server. Employees of RTI who access the data for analyses have signed a confidentiality agreement.

IEA sub-contracts the assessment administration to RM Education Limited (United Kingdom), whose affiliates include SoNET Systems Pty Ltd (Australia), and RM Education Solutions (India) Pvt. Ltd.

As RM Education Limited is established in the United Kingdom, for transfer of personal data outside of the European Economic Area, IEA relies on the European Commission's decision on the adequate protection of personal data by the United Kingdom, whereby the European Commission declared that the United Kingdom offers an adequate level of data protection, and no further measures are needed for data transfers. In case the position of the European Commission changes in this respect, following a Data Transfer Impact Assessment, IEA will conclude EC Standard Contractual Clauses (Module II Controller to Processor) for transferring pseudonymized personal data to the United Kingdom.

Access by employees of SoNET and RM, acting as data processor, is limited to a select group of staff who are required to have access for maintaining the application and online environment. These SoNET and RM employees have signed a confidentiality agreement.

IEA also shares the pseudonymised data with the ERC and other participating countries using a secure SharePoint server.

For TIMSS 2027, the ISC in collaboration with IEA will implement AI-based automated scoring (AS) for a subset of constructed-response (CR) items in parallel with the human scoring conducted within each country/education system. The AI-based tool for language processing is provided by OpenAI, LLC. The ISC has obtained a formal GDPR-compliant Data Processing Addendum to their agreement with OpenAI. This is a contract that OpenAI will not use or store the data for model training or improvement. It offers clear terms for processing, access control, and data deletion in adherence with GDPR.

The OpenAI sub-processor is provided only with responses to the CR items, without any personally identifiable information (PII).

Related data

Along with the students, teachers, principals, and parents are also asked to complete context questionnaires. Information collected from all of these sources is linked, and this linked information is in the final version of the international research database.

Public accessibility

The final international research database will be accessible to the public from the following sites:

<https://www.iea.nl/data-tools/repository/timss> (Amsterdam, Netherlands)

<https://timssandpirls.bc.edu/index.html> (Boston, USA)

All data in the database are pseudonymous and, as such, cannot be linked to individuals without the use of additional information, which is kept separately, and its security is ensured by using appropriate technical and organisational measures.

Automated decision-making and profiling

Automated decision-making, including profiling, are carried out in compliance with GDPR.

Rights of Data Subjects

The GDPR grants the following rights to you as a data subject:

- Right to Withdraw Consent, if processing is based on consent—Article 7 GDPR
- Right to Information—Articles 13 and 14 GDPR
- Right of Access—Article 15 GDPR
- Right to Rectification—Article 16 GDPR
- Right to Erasure—Article 17 GDPR
- Right to Restriction of Processing—Article 18 GDPR
- Right to Data Portability—Article 20 GDPR
- Right to Object—Article 21 GDPR
- The right not to be subjected to decisions only based on automated decision making of profiling—Article 22 GDPR
- Right to lodge a complaint with a supervisory authority—Article 77 GDPR

The supervisory authority to lodge a complaint in Ireland is:

Data Protection Commission

6 Pembroke Row

Dublin 2

D02 X963

Ireland

Website Address: www.dataprotection.ie