Annex 1

Description of Processing Activities and each of the Parties' responsibility for related GDPR compliance

Processing activities IEA

For which purpose are data collected and processed?

The International Association for the Evaluation of Educational Achievement (IEA) is an international cooperative of national research institutions, governmental research agencies, scholars, and analysts working to research, understand, and improve education worldwide.

The IEA conducts the International Computer and Information Literacy Study (ICILS) 2023 to investigate a question of critical interest today: How well are students prepared for study, work, and life in a digital world? The study measures international differences in students' computer and information literacy (CIL).

During the implementation of ICILS 2023, IEA collects data that are exclusively used for scientific purposes. The IEA provides the Country with guidelines on how to implement the study. These guidelines include survey operations that are GDPR compliant, if followed by the Country. IEA is responsible for GDPR compliant processing of all submitted data by the Country feeding into the public research database and the international report.

Which data are collected by the IEA in the course of ICILS 2023?

In each school participating in ICILS 2023, certain information is requested.

The school principals (or, if a principal is not available, other equally qualified delegates) of participating schools are invited to complete a principal questionnaire in order to provide the study with information about a wide range of issues such as school characteristics as well as ICT resources and support for students and teachers, and guidance and training for ICT provided to school staff.

Teachers of participating schools are invited to complete a teacher questionnaire in order to provide the study with information about issues such as teachers' perception of teacher participation at school, the school environment, Computer and Information Literacy education at school, and a few personal details (age, gender, education, and experience). Teachers who teach a subject related to Computer and Information Literacy are also asked about aspects of their teaching of this learning area.

Prior to the test administration, IEA provides tracking form templates to the Country to gather data on the age, gender and exclusion status of the students in the participating ICILS classes. Tracking forms are used to ensure the correct assignment of assessment materials to the selected students.

Students in the selected ICILS classes are invited to complete the ICILS 2023 student test which measures knowledge and understanding of concepts and issues related to Computer and Information Literacy.

The students in the participating ICILS classes are further asked to complete the ICILS 2023 student questionnaire in order to provide the study with information about students' Computer and Information Literacy at school, information about their ICT facilities and use at home, in school, and outside of school, and a few personal details (gender, age, country of birth, country of birth of their parents/guardians, language(s) spoken at home, parents/guardians main job, parents/guardians level of completed education, socioeconomic background).

The IEA provides the Country with template Data Protection Declarations containing all GPDR relevant information to the respondents in ICILS 2023.

What kind of data are collected?

Data from answers to the questions from every completed ICILS school questionnaire, teacher questionnaire, student questionnaire and ICT coordinator questionnaire are collected. This is done in 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).

Furthermore, ICILS 2023 collects test data from participating students in the form of numbers representing selections (for example, a multiple-choice question), text (for example, a direct answer to a question) or an information product in response as part of a computer-based task.

Teacher, ICT coordinator and principal questionnaires are administered electronically online and there is further logging information stored regarding the first and latest log-in time, the number of times a respondent has logged in in total, the browser which was used, the number of the current question, and whether or not the completed questionnaire responses have been submitted.

The ICILS 2023 assessment (administered electronically using the "Assessment Master" provided by RM Results), collects and stores different types of data depending on how students interact with it.

Three general types of data are gathered: Active response data (1), event data (2), and system data (3).

While the same active response data (1) are collected and stored as if the assessment were conducted on paper (answers to multiple-choice and open text answers as well as information products), the Assessment Master collects event (2) and system data (3) in addition.

The event data (2) storage includes the storage of login details, i.e. the time of login, logout or timeout to assessment parts; the storage of time when buttons, selections and other on-screen interfaces are clicked; and the storage of the time of scrolling events, or the use of tools such as an on-screen ruler.

Event data (2) are logged together with the active response data (1), and make up part of the set of data that allows the IEA to analyze the way that students interact with the assessment. (For example, did students spend a long time on solving certain questions, and if so, was there something confusing about the way these were written?)

The Assessment Master further collects system data (3), i.e. the screen resolution and the browser version. These are stored so the IEA can check that the ICILS 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. However an international ID system is used to uniquely identify each respondent (school principals, teachers, students, ICT coordinators). The respondent names can be collected by the Country, if allowed within the country. However, respondent names must not be shared with the IEA or any other third parties. The IEA provides the Country with software enabling the Country to submit pseudonymized data. Thus, all submitted data must be pseudonymous, 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 being kept separately and subject to technical and organizational measures to ensure that the personal data are not attributed to an identified or identifiable natural person).

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

ICILS data are stored securely and cannot be accessed by any external persons or systems. Moreover, any employees at IEA who access the data for processing have been suitably briefed on what constitutes an acceptable treatment of data and have signed a confidentiality agreement.

Response data are archived for an indefinite amount of time following the technical and organizational measures described in Annex 2 so that they remain available for scientific and statistical research. These responses eventually result in a database that allows researchers to compare education systems worldwide (see Public accessibility below).

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

With whom and how are data from ICILS shared?

Response data are sent from national centers to the IEA, via the web-based collaborative platform Share Point, in 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 being kept separately and subject to technical and organizational measures to ensure that the personal data are not attributed to an identified or identifiable natural person).

ICILS is directed by IEA in Amsterdam and Hamburg and the data analysis occurs there. Response data are required for the analysis but are sent to IEA Amsterdam (?) and IEA Hamburg via the web-based collaborative platform Share Point, in pseudonymous form. IEA employees who access the data for analyses have signed a confidentiality agreement. The IEA safeguards the transfer of the data to third countries, by implementing appropriate and suitable measures such as EC approved Standard Contractual Clauses.
The data are also shared back, again via the web-based collaborative platform Share Point, with the national research centers administering ICILS. The IEA also shares the pseudonymized data with the Country and other participating countries using a secure FTP server. This data become anonymized when respondent names are deleted by the Country.

IEA uses the assessment master system provided by its vendor RM (processor: RM Education Ltd; Address: 142B Park Drive, Milton Park, Abingdon, OX14 4SE, United Kingdom, Company Number - 1148594) to collect the assessment data digitally. All mandatory data processing agreements necessary for the processing of data by RM have been concluded. The IEA safeguards the transfer of the data to its partners in third countries, by implementing appropriate and suitable measures such as a specific Data Processing Agreement and EC approved Standard Contractual Clauses.

Public accessibility

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

https://www.iea.nl/data (Hamburg, Germany)

All data in the database are pseudonymous.

Processing activities of Country

For which purpose are data collected and processed?
Reference is made to the purpose of IEA's data collection (see above). The Country collects data on a national level for the purpose of the International IEA Study. The Country is responsible for the survey operations and GDPR compliant processing of its collected data.

The **Nacionalni centar za vanjsko vrednovanje obrazovanja** is administering ICILS 2023 in Hrvatska at the request of, and on behalf of, **Ministarstvo znanosti i obrazovanja**. This is in accordance with one of the functions "**organizira provođenje međunarodnih ispita i međunarodnih komparativnih analiza u obrazovanju**" set out in the **Zakon o Nacionalnom centru za vanjsko vrednovanje obrazovanja** (NN 151/04, 116/21) (which can be viewed in full at: https://www.zakon.hr/z/324/Zakon-o-Nacionalnom-centru-za-vanjsko-vrednovanje-obrazovanja).

Which information is requested?
Reference is made to the paragraph which describes which data are collected by the IEA (above). The Country also uses the tracking forms provided by the IEA to collect the names of respondents (students and teachers). Respondent names are not shared with the IEA.

Participation in ICILS is voluntary. 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.

Objections 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 **Nacionalni centar za vanjsko vrednovanje obrazovanja** (at **+385 1 4501 899** or **info.centar@ncvvo.hr**). If an individual objects to the data processing in the study, no additional data will be collected for that

individual. Some information on objections and exclusions is retained to validate the sample and to inform future administrations (e.g., to see if girls are more likely to object to participation in the study).

Queries related to how personal information is protected can be directed to Karolina Karmely (**povjerenstvo-podatci@ncvvo.hr**).

A numeric student ID is recorded to uniquely identify each student. The relationship between this ID and the student name, or national registration number is known to the school coordinator and to the **Nacionalni centar za vanjsko vrednovanje obrazovanja.**

The Country is responsible for complying with its local data protection regulations and for following the survey operations procedures as described in the guidelines by IEA. The Country needs to adapt these procedures to fulfil the data protection laws in place in the Country. The Country is responsible for ensuring that respondent names are by no means shared with the IEA or any other third parties. The Country uses the software provided by IEA to ensure that data are submitted in pseudonymized form to IEA.

What kind of data are collected?
Reference is made to the kind of data collected in the IEA section (above).

Where, how and for how long are data from ICILS stored?
The Country will not store the relevant data as specified in the Joint Controller Agreement longer than necessary for the purposes of the International IEA ICILS Study for which the data are collected.

The Country has taken all sufficient organizational and technical measures to ensure safe storage of the data which has been collected for the purposes of the International IEA ICILS Study.

The **Nacionalni centar za vanjsko vrednovanje obrazovanja** will store respondent names securely at our facility in **Zagreb, Hrvatska**. Respondent names will be deleted by the **Nacionalni centar za vanjsko vrednovanje obrazovanja** upon the release of the International ICILS report and no later than the end of December 2025, in line with the **Nacionalni centar za vanjsko vrednovanje obrazovanja**'s data retention policy. From then on, all data with the IEA or sub-contractors becomes anonymized.

With whom and how are data from ICILS shared?
The Country shares the national ICILS data only with persons who have signed a commitment on confidentiality and data protection and are part of its national study or research center, including sub-contractors.

Public accessibility
The final international research database will be accessible to the public from the following sites:
https://www.iea.nl/data (Amsterdam, Netherlands)
All data in the database are pseudonymous.