Replay Project

Gaming Technology Platform for Social Reintegration of Marginalised Youth

D4.2

The Assessment Protocol and Handbook

Due Date: 31st January 2010 Release Date: 4th January 2010

Circulation: EC

Responsible White Loop
Compiled by: Will Leonard
Partners: All

Table of Contents

1. Executive Summary

2. Data Collection Procedure

2.1. Availability & Authorisation
2.2. Nature of data collected
2.3. Integrity

3. Assessment Procedure

3.1. Format of assessment
3.2. Additional qualitative assessment
3.3. Prioritisation of Indicators
3.4. Stakeholders
3.5. Work Package 3
3.6. Costs and Duration of Assessment

4. Assessment Indicators

4.1. List of main objectives
4.2. List of Indicators

5. Conclusions

1.- Executive Summary

This document is intended as a continuation of the work carried out in the Deliverable 4.1 – Socio-Organisational & Ethical Assessment Methodology Framework of the Replay Project. Its purpose is to provide a detailed description of the assessment tools that will be used to carry out the socio economic and ethical assessment as defined in this document in the three test centres in Spain, England and Romania in which the Replay game will be deployed, along with an explanation of the how the data to be generated by this assessment will be collected and stored.

We begin with a description of the data collection procedure and associated protocol, with particular reference to the security procedures that will govern entry and access to the online database which will be used to gather assessment results.

We then outline the assessment procedure explaining how the assessment will be carried out, describing the format of this assessment and the options presented to the participants as part of the process. This is followed by a description of the stakeholders in the assessment procedure as well as an indication of when the assessment will take place and the duration of this process.

Finally, we outline the indicators that will form the basis of the Assessment and will feed into the recommendations for take up strategies which will be produced in D4.3 – Final Report on Socio-Organizational, and Ethical Impacts.

2. Data Collection Procedure:

2.1 Availability & Authorisation

All data relating to the socio-economic and ethical assessment carried out by Replay will be gathered through a centrally controlled online data input and database facility. Availability, disclosure and modification of data will be strictly controlled by a clear access control policy. All data will be entered by users logging on to a password protected database through a White Loop intranet. Password verification of entry will also control who has access to what information, which will be restricted according to the profile of the user. Authorisation rules will apply to entry of all data related to the assessment. The availability of data will be moderated by Replay Consortium partner, White Loop Ltd. Access control within the three test centres of the Replay project will be internally coordinated by a person designated within those centres, who will be appraised of their responsibilities under the contractual terms set by the Replay consortium.

As well as checks carried out on all data entered into the online system, regular contact will be kept with coordinators in each centre to ensure that all security procedures are followed as well as providing advice and support. The data gathered for this assessment relates to the logistical and administrative capabilities of the test centres, only in so far as they relevant to the needs of the Replay Project, and will not be discussed or interpreted for any other purpose. However, some of the data measured may be considered sensitive by the individual institutions and availability of this data must therefore be restricted to each institution and the Replay consortium. These restrictions will be controlled as part of the login to the central data system for the assessment. Access control policies will thus govern the disclosure and modification of information, restricting all access to all data entered by an individual institution to the established coordinator within the test centre and the Replay consortium.

2.2 Nature of data collected

In terms of the methodology for data collected from the indicators for the socio-organisational and ethical assessment, no sensitive data directly related to children either individually or collectively will be held. All the data collected is gathered from the secondary users of the Replay technology, the psycho pedagogical staff at the three Replay test centres, and the Management staff at those institutions. However, as

outlined above, all reasonable attempts at protecting the confidentiality and integrity of data will be taken through relevant access control policies.

One of the main principles for the socio-organisational and ethical assessment is adherence to good practice in terms of the handling of sensitive data, as no data will be held against an individual or organization that does not specifically consent to this process as part of their contractual obligations to the Replay Project. Furthermore, all efforts will be taken to ensure that data subjects fully understand the purpose behind each indicator associated with the assessment as well as how this data will be later processed.

2.3 Integrity

Integrity of data collected through the assessment will be ensured through measures taken to protect against malicious or accidental modification of this data. This protocol will form part of the regular checks placed upon data entry by consortium partner White Loop. This process will be reinforced by the password protected data entry system put in place for collection of indicator measurement.

3. Assessment Procedure

3.1 Format of Assessment

The precursor to this deliverable D4.1 – Assessment Methodology Framework established a set of 'objectives' for the assessments as well as outlining a methodology for the creation of indicators from these objectives. As such, all indicators are produced as part of a wider objective in understanding the socio-economic and ethical implications of the Replay game for the 3 test centres. The assessment of each indicator will carried out within a 4 part rubric further defined for qualitative analysis by a Likert scale. The ultimate goal behind the measurement of these indicators is to gather data to feeds into a set of recommendations for REPLAY take up strategies with particular reference to training needs, process list of training and practical needs for a report to be produced for D4.3 Final Report on Socio-Organizational, and Ethical Impacts as part of Work Package 4 of the Replay Project.

The formulation of all indicators is designed to cover all options possible of the actual situation in the institution in direct relation to the needs of successfully employing the

Replay game. They are therefore, not intended to provide a wider description of the capabilities within the test centre. This assessment then, is in no way intended as an measure of the ability of the centre to act as an effective psycho/pedagogical institution.

In accordance with the methodology outlined in Deliverable 4.1 and in order to provide a consistent dataset for the project, the participants for the assessment to be carried out as part of Task 4.3 – Develop the operational assessment process and tools, assessment launch and analysis, will be asked to respond to a set of multiple choice options provided with each indicator. These options measure the preparation and the necessary conditions for successful implementation of the Replay game in the centre. As such they measure on a four part rubric scale:

Optimal = Chosen application environment exceeds the minimum requirements

Functional = Chosen application environment meets the minimum requirements

Semi-Functional = Chosen application environment shows evidence of a limited though not sufficient level of capacity towards meeting the minimum requirements

Inadequate = Chosen application environment has little or no capacity to meet the minimum requirements

The respondent will be asked to choose the option which best corresponds to the situation within their institution. Each option corresponds to a description of the preparation within the school and a Likert scale is added to each option to better gauge the actual situation within the school. As can be seen from the options above the choice provided to respondents in the assessment allows for consistent feedback regarding which actions should become feedback within the take up strategy for Replay (to be produced in deliverable 4.3). It does this, by showing which requirements/conditions are close to being met (**Semi-Functional**) and which will need considerable attention if they are to reach a functional level (**Inadequate**). Those indicators which return a high percentage of **Inadequate** responses will be prioritised in the Replay take up strategy, to be developed in D4.3. In the hypothetical case where the large majority of the minimum requirements imposed by the game are met by the capabilities within the test centres, that is to say, the majority of assessment responses fall into **Functional** and **Optimal** categories; this will enable the take-up strategy to prioritise its focus on ensuring the ideal conditions for the effective deployment of the Replay game.

Each respondent will have the opportunity to bypass an indicator by choosing a **Not Applicable** option if they do not consider it relevant to either their professional experience or role within the Replay project testing procedure. Respondents will have complete control over what indicators they choose to be consulted on.

The second part of the prioritisation task is the decision on which objectives are considered most vital for the successful implementation of the Replay game, internally within the consortium. This prioritisation will also be determined by consultation with expert external stakeholders.

3.2 Additional qualitative assessment

Although the assessment objectives and indicators have been chosen to cover all possible socio-organisational and ethical factors involved in the use of the Replay gaming technology, it is anticipated that the test centres themselves may identify an number of factors not covered in the closed set of indicators produced for this task. Therefore, a number of focus group workshops will take place with a selected and representative group of respondents to the assessment. These workshops will provide further feedback to inform the production of recommendations for Replay take up strategies which will be outlined in Deliverable 4.3 – Final Report on Socio-Organizational, and Ethical Impacts. As well as providing some in depth qualitative analysis of additional factors relevant to the assessment, these workshops will also enable the Replay consortium to develop a greater understanding of those indicators cited as a priority within the assessment, as discussions will be focused on the prioritised indicators from the main Socio-Organisational and Ethical assessment as described in section 3.1 of this deliverable.

Data collection:

The focus group discussions as described will be monitored and recorded (with the consent of those involved) and a summary will be produced and agreed upon at the end of every session in conjunction with the stakeholders from the test centres. These summaries will then be incorporated by the Project consortium into the recommendations for Replay take up strategies to be produced in Task 4.3.

3.3 Prioritisation of Indicators

The Project consortium has chosen to prioritise a number of indicators within the assessment. Indicators are prioritised for the purposes of the consortium alone and

during the main (closed) online assessment stage, respondents are not made aware of this prioritisation. The purpose of this process is to provide a focus for the recommendations for take up strategies to be produced in Task 4.3. The results from these assessment indicators will be given the most weight and in the case that the data processed from the online assessment shows a particular weakness within these indicators, suggested take up strategies will in turn be focused on these areas. Furthermore, these prioritised indicators will be the focus of discussion within the additional qualitative assessment explained in 3.2 of this deliverable.

One of the main areas of prioritisation within the Replay assessment indicators is ensuring that the basic requirements of deploying the game are in place at the test centres. If schools are unable to effectively run the game in Play and Replay modes both the effectiveness of the game as a tool and the integrity of the data gathered will be called into question and the game will be rendered non functional. For this reason the following objectives and their corresponding indicators have been chosen:

Identify the practical issues relating to the installation of the game

Identify the practical issues relating to the running of the game

Identify the human resource issues pertaining to the effective completion of a game session

The other key area for prioritisation of these issues relates to the novel nature of the Replay game. Exploring sensitive issues around anti social behaviour in a gaming environment is a delicate matter, as the content of the most popular commercial video games is often cited as a catalyst for anti-social behaviour. It is therefore vital to ensure that the specific content within the game is acceptable and entirely reflects the serious pedagogical aims of the Project; any other scenario renders the game unacceptable to its target audience.

Identify issues related to the ethics of specific game contents

3.4 Stakeholders

A variety of stakeholders are involved in the socio-organisational testing procedure outlined here. Within the consortium, there are three principle parties involved, White Loop Ltd, charged with coordinating the overall testing procedure and those sessions held in the UK, the Replay consortium members who will coordinate the testing procedures at national level and the staff at the three test centres where the gaming session will take place, the UK, Spain and Romania.

Within the institutions involved in the consultation and testing phase of the Project, (secondary user) respondents will be drawn both from the psycho-pedagogical staff and those responsible for the management of each institution, as selected by the coordinator appointed within each institution. The psycho-pedagogical staff are included because of there experience of the practical and ethical challenges associated with working directly with the primary users of the Replay technology, children. Management staff are included due to there wider knowledge of the logistical and protocol challenges associated with deploying the Replay technology in a psycho pedagogical institution. These stakeholders will be drawn from the following three centres:

Country	Centre	Location
Spain	Los Cerezos	Alicante
United Kingdom	Woolwich Polytechnic School	London
Romania	Asociaţia Română de Asistenţă Psihopedagogică şi Socială si de Promovare a Talentelor	Iasi

Additional stakeholders are the three ethics committees assigned to consult on all ethical considerations within the Project. These committees will help further define the ethical challenges presented by implementing the Replay technology and help qualify and interpret the results from the socio-organisational and ethical assessment prior to addressing the recommendations for take up strategies to be produced in Deliverable 4.3.

Country	Centre	Committee
Spain	Alicante	• Ethics Committee of Polytechnic University of Valencia • Ethics Committee of Clinical Research – General Hospital of Alicante
United Kingdom	London	• University of Greenwich Ethics Committee
Romania	Iasi	• Ethics Committee of University AI.I. Cuza

3.5 Work Package 3

The socio-organisational and ethical assessment carried out through this Work Package will be run in parallel with that to be carried out in Work Package 3. However, the data gathered by the two assessments will be stored separately. The two assessments are carried out in parallel with a view to providing a coordinated overall description of the practical, ethical and gameplay issues associated with deploying the Replay game.

3.6 Costs and Duration of Assessment

The actual socio-organisational assessment launch carried out as part of Task 4.3 will begin with the end of the Playing Sessions carried out in Task 3.4 – Playing sessions and data collecting of Work Package 3. It is anticipated that it will take one respondent for the assessment between fifteen and twenty minutes to complete the online assessment form, with all assessment sessions expected to be completed within two weeks of from that time.

The only costs directly associated with the assessment as described in this deliverable are those of human resources/staff time deployed within each centre to successfully complete the assessment.

4. Assessment Indicators

4.1 List of main objectives

1. Identify the practical issues relating to the installation of the game

2. Identify issues related to the recruitment of players for the game and the effective communication with those players prior to the game

3. Identify issues relating to the communication with parents both before and after the session

4. Identify the practical issues relating to the running of the game

5. Identify the human resource issues pertaining to the effective completion of a game session

6. Identify issues related to the safe and efficient storage of the Replay hardware

7. Identify issues related to the ethics of the game as a whole

8. Identify issues related to the ethics of specific game contents

9. Identify the way in which the game could/should integrate with the current behavioural programmes being run in the school or institution

10. Identify issues around data storage, access to and usage of data

4.2 List of Indicators

4.2.1 Objective - Identify the practical issues relating to the installation of the game

The purpose of this Objective is to measure whether the requirements around physical space, staff training and access to ICT imposed by use of the Replay technology are feasible within user environments. It will serve to establish areas in which preparation for installation of our technology requires careful attention judging from the present shortfalls in test centres.

Rubric level	Identify the practical issues relating to the installation of the game ***Privacy of physical space available for the installation of REPLAY***	Please choose one option
Optimal	A sound proofed room was reserved for installing the REPLAY game.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	Discussions taking place in the room, in which the REPLAY sessions are installed, cannot be overheard by other students.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	Discussions held during REPLAY session may be overheard by other students.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	The space available for installation of the REPLAY game is open to children other than the child user during REPLAY sessions.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify the practical issues relating to the <u>installation of the game</u> ***Level of understanding/training required for set-up***	Please choose one option
Optimal	All staff involved in the deployment of the game have been trained in the gameplay and technical operation of the REPLAY technology.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	One member of staff in the institution has been trained in the gameplay and technical operation of the REPLAY technology.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	No member of staff in the institution has been trained in **either** the gameplay **or** the technical operation of the REPLAY technology.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	No member of staff in the institution has been trained in **both** the gameplay involved and technical operation of the REPLAY technology.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify the practical issues relating to the <u>installation of the game</u> ***Technology/hardware needs and set-up***	Please choose one option
Optimal	The institution has access to all the necessary software and hardware required to operate the REPLAY technology in more than one location within the institution.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	The institution has access to all the necessary software and hardware required to operate the REPLAY technology in one location within the institution.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	The institution has access to **either** all the necessary software **or** hardware required to operate the REPLAY technology.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Inadequate	The institution does not have access to **both** the necessary software **and** hardware required to operate the REPLAY technology.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

4.2.2 Identify issues related to the recruitment of players for the game and the effective communication with those players prior to the game

The concept of diagnosing symptoms of anti-social behaviour through video gameplay will be a novel one for the vast majority of primary users of this technology. Therefore, identifying the children who would most benefit from such a novel environment is a challenge, especially in the case of the Replay Project where the Primary user is a child. It is important then to ensure that the participating children are fully appraised of the challenging nature of the Replay project and how to prepare themselves for the experience of being involved in the Project.

Rubric level	Identify issues related to the recruitment of players for the game and the effective communication with those players prior to the game ***How individuals are identified as being appropriate for being part of a session***	Please choose one option
Optimal	A clear procedure with an established set of criteria for the recruitment of participants is followed. The inclusion of a child in a game is reviewed by a number of assessors.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	A clear procedure with an established set of criteria for the recruitment of players is followed.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	A procedure with an undefined set of criteria for the recruitment of players is followed.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	Players for the REPLAY game are chosen at random without any reference to a set of criteria.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify issues related to the recruitment of players for the game and the effective communication with those players prior to the game *Communication with players*	Please choose one option
Optimal	Participating children have had a number of introductory sessions to the Replay technology with staff at the centre.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	Participating children have had an introductory session to the Replay technology with staff at the centre.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	**Some** participating children have had an introductory session to the Replay technology with staff at the centre.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	**No** participating children have had an introductory session to the Replay technology with staff at the centre.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

4.2.3 Identify issues relating to the communication with parents both before and after the session

Ensuring effective communication of the objectives and result of the Replay project to Parents of primary users is a vital precondition of obtaining consent for data subject participation in user testing. The Project consortium will take all the necessary steps to develop a full understanding of the consequences of participation in the Replay project is a priority. Part of this process is establishing a system of regular dialogue with Parents of Primary Users. The purpose of this objective is to check that test centre institutions are aware of and have taken all possible steps to ensure that the parents of primary users have been appraised of the purposes of the Replay project.

Rubric level	*Identify issues relating to the <u>communication with parents</u> both before and after the session* ***How the objectives and outcomes of the session are communicated to parents***	**Please choose one option**
Optimal	The institution has an established protocol for communication with parents.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	The institution communicates regularly with parents.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	The institution rarely communicates with parents.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	The institution never communicates with parents.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

4.2.4 Identify the practical issues relating to the <u>running of the game</u>

The novel nature of the Replay technology interface and the element of physical activity incorporated into its gameplay could in some cases pose a challenge to secondary users who have been charged with the successful realisation of primary user testing. It is therefore vital, to ensure that all secondary users are fully competent in the use of this technology, as well as able to carry out a supervisory role in relation to the activities of the Primary user. It is also vital to measure any potential safety concerns for the Primary user as well as concerns over lack of relevant support material for the Secondary User.

Rubric level	Identify the practical issues relating to the <u>running of the game</u> ***The ability of the teacher to launch and run the game in different modes***	Please choose one option
Optimal	I am confident launching, running and monitoring the gameplay in both Play and Replay modes.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	I am able to launch, run and monitor the gameplay in both Play and Replay modes.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	I am unable to **either** launch **or** run **or** monitor the gameplay in both Play and Replay modes.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	I am unable to launch, run or monitor the gameplay in both Play and Replay modes.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify the practical issues relating to the <u>running of the game</u> ***The time required to effectively run the game***	Please choose one option
Optimal	Running the REPLAY game sessions takes one hour.	
Functional	Running the REPLAY game sessions takes one and a half hours.	

Semi-Functional	Running the REPLAY game sessions takes two hours.	
Inadequate	Running the REPLAY game sessions takes three hours.	

Rubric level	**Identify the practical issues relating to the <u>running of the game</u>** ***The safety of the game from a users perspective***	**Please choose one option**
Optimal	I have been personally consulted on the effectiveness of the health and safety precautions related to use of the REPLAY technology.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	I understand and have no concerns regarding the effectiveness of the health and safety precautions related to use of the REPLAY technology.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	I do not understand the health and safety precautions related to the use of the REPLAY technology.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	I am concerned that the REPLAY technology represents a health and safety risk to the user.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify the practical issues relating to the running of the game *The requirement for/effectiveness of support materials*	Please choose one option
Optimal	I have been personally consulted on what support material I require and received adequate support material.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	I have received adequate support material.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	The support material I have received is insufficient.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	I have not received any support material.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

4.2.5 Identify the human resource issues pertaining to the effective completion of a game session

In order for the testing of the Replay game to run smoothly the organisation of all staff involved is needed. Where staff have accepted certain responsibilities in this respect, it is important to ensure that these responsibilities do not over stretch the resources of the institution. Feedback in this area will help to design solutions to make the allocation of resources within educational institutions as efficient as possible. In the same way it is important to analyse whether individuals are comfortable with the responsibilities they are given with a view to making training for use of the Replay technology as comprehensive and responsive to the needs of secondary users as possible.

Rubric level	Identify the human resource issues pertaining to the effective completion of a game session *The human resources (in terms of staff time) required to run the game effectively*	Please choose one option
Optimal	Running the REPLAY game sessions required one member of staff.	
Functional	Running the REPLAY game sessions required two members of staff.	
Semi-Functional	Running the REPLAY game sessions required three members of staff.	
Inadequate	Running the REPLAY game sessions required more than three members of staff.	

Rubric level	Identify the human resource issues pertaining to the effective completion of a game session *The human resources (in terms of staff time) required to follow up effectively*	Please choose one option
Optimal	The amount of staff time required to carry out the follow up activities for the REPLAY game sessions is less than that anticipated prior to these activities.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Functional	The staff time required to carry out the follow up activities for the REPLAY game sessions is that anticipated prior to these activities.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	The staff time required to carry out the follow up activities for the REPLAY game sessions is more than that anticipated prior to these activities.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	It has not been possible to carry out the follow up activities required for the REPLAY game sessions due to a lack of available staff time.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	**Identify the human resource issues pertaining to the effective completion of a game session** ***The ability of the teacher to effectively deal with questions or issues related to the usability of the game***	**Please choose one option**
Optimal	I am able to deal with questions or issues related to the usability of the REPLAY game.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	I am able to deal with questions or issues related to the usability of the REPLAY game, but would prefer not to.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	I am able to deal with **some** questions or issues related to the usability of the REPLAY game.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Inadequate	I am unable to deal with **any** questions or issues related to the usability of the REPLAY game.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

4.2.6 Identify issues related to the safe and efficient storage of the Replay hardware

Safe storage of the hardware associated with the Replay testing procedures is necessary to ensure the correct functioning of these sessions. In the case where this equipment is used to store results from the testing procedure, safe storage is doubly important as accidental or intentional loss or corruption of data could result in the confidentiality and integrity of data becoming compromised. Therefore, all possible precautions must be taken to avoid such scenarios.

Rubric level	Identify issues related to the safe and efficient storage of hardware *The degree of security needed*	Please choose one option
Optimal	The room reserved for storing the REPLAY game hardware can only be accessed by a pin code, which is only supplied to authorized personnel.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	Only specifically authorized personnel are given access to any hardware associated with REPLAY.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	Some unauthorized personnel have been given access to the REPLAY hardware.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	REPLAY hardware is stored in an area with no locking facility.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify issues related to the safe and efficient storage of hardware *Efficient transport of hardware*	Please choose one option
Optimal	The space allocated for storage of the hardware is located in the room/location where the game is deployed.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	Moving REPLAY game hardware to the room/location where the game is deployed does not present any logistical problems for the school involved.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	Moving the REPLAY game hardware to the room/location where the game is deployed presents a logistical problem for the school involved.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	Moving the REPLAY game hardware to the room/location where the game is deployed is impossible.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

4.2.7 Identify issues related to the ethics of the game as a whole

Whenever novel equipment/technology is introduced into an educational environment it often carries with it a new set of challenges as associated side effects for both teacher and student. Carrying out a diagnosis of these challenges is important to ensure that the introduction of the Replay technology carries with it no negative effects on both teaching faculty and students of the various test centres.

Rubric level	Identify issues related to the ethics of the game as a whole *The motivational preparedness of teaching staff*	Please choose one option
Optimal	I enjoy using gaming technology as a teaching tool.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	I have no concerns regarding the use of gaming technology as a teaching tool	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	I have a few concerns regarding the use of gaming technology as a teaching tool.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	I am opposed to the use of gaming technology as a teaching tool.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify issues related to the ethics of the game as a whole *The level of unreasonable expectation created by the game on the primary user, in terms of their wider education*	Please choose one option
Optimal	The REPLAY sessions have had a positive effect on participating children's attitude to their education.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Functional	The REPLAY sessions have had no effect on participating children's attitude to their overall education.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	The use of gaming technology can create unreasonable expectations in young people concerning the regular use of ICT in the classroom.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	The use of gaming technology definitely creates unreasonable expectations in young people concerning the regular use of ICT in the classroom.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

4.2.8 Identify issues related to the ethics of specific game contents

Although the content of the Replay game is both the result of an extensive consultation and has been reviewed several times to ensure that it is appropriate and relevant to the target audience, further external verification of this is vital to ensure that nothing has been overlooked or not taken into account during the design of this content. Furthermore, all precautions have been taken to ensure that this content is in no way offensive or likely to further inflame or incite behavioural problems in primary users.

Rubric level	Identify issues related to the ethics of specific game contents *The appropriacy of content to the diagnosis of anti-social behaviour/behavioural problems*	Please choose one option
Optimal	I consider the content of the Replay game to represent a highly positive environment and beneficial virtual experience for the user.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	I consider the content of the Replay game to be in no way inappropriate to **either** myself or children	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	I consider the content of the Replay game to be inappropriate to **either** myself **or** children.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	I consider the content of the Replay game to be inappropriate to **both** myself **and** children.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify issues related to the ethics of specific game contents *Secondary user's awareness of the Replay content and the reasons for its inclusion*	Please choose one option
Optimal	I consider the content of the Replay game to be highly relevant to the discussion of anti-social behaviour.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	I consider the content of the Replay game to be relevant to the discussion of anti-social behaviour.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	I consider only part of the content of the Replay game to be relevant to the discussion of anti-social behaviour.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	I consider the content of the Replay game to be irrelevant to the discussion of anti-social behaviour.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify issues related to the ethics of specific game contents *The appropriacy of content in relation to the emotional and psychological problems of primary users*	Please choose one option
Optimal	I believe the content of the REPLAY game to be ideal for use with children with emotional and psychological problems.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Functional	I have no concerns over the appropriacy of the content of the REPLAY game for use with children with emotional and psychological problems.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	I find **some** of the content of the REPLAY game to be inappropriate for use with children with emotional and psychological problems.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	I find **all** of the content of the REPLAY game to be inappropriate for use with children with emotional and psychological problems.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

4.2.9 Identify the way in which the game could/should integrate with the current behavioural programmes being run in the school or institution

In some cases the introduction of the Replay game will have to work in unison with a wider set of behavioural programmes within the institution. Understanding, in this way, what the logistical impact of the Replay game on the time and personnel resources of test centres would be, helps to establish solutions for ensuring the efficiency and success of its introduction while avoiding any negative impact on overall management.

Rubric level	Identify the way in which the game could/should integrate with the current behavioural programmes being run in the school or institution *The particular timing of the game sessions in relation to current programmes*	Please choose one option
Optimal	The REPLAY sessions are entirely complementary to the existing behavioural programme sessions within the institution.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	There are no timetable conflicts between the REPLAY and existing behavioural programme sessions within the institution.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Semi-Functional	The REPLAY sessions have caused a conflict in the timetabling of existing behavioural programme sessions within the institution.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	The REPLAY sessions have caused multiple conflicts in the timetabling of existing behavioural programmes within the institution.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	**Identify the way in which the game could/should integrate with the <u>current behavioural programmes</u> being run in the school or institution** ***Nature of data captured***	**Please choose one option**
Optimal	Data captured from the REPLAY sessions is not stored under the name of a specific child and is only that agreed upon by the informed consent of test subject and parent/guardian.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	Data captured during the REPLAY sessions is only that agreed upon by the informed consent of test subject and parent/guardian.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	Part of the data captured during the REPLAY sessions is not that agreed upon by the informed consent of **either** test subject **or** parent/guardian.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	All of the data captured during the REPLAY sessions is not that agreed upon by the informed consent of **both** test subject **and** parent/guardian.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify the way in which the game could/should integrate with the current behavioural programmes being run in the school or institution ***The allocation of human resources within the context of current programmes***	Please choose one option
Optimal	Allocating staff to the REPLAY Project has not negatively affected the existing behavioural programmes within the institution in any way.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	Allocating staff to the REPLAY Project has caused some minor, inconsequential readjustments to the running of existing behavioural programmes.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	Allocating staff to the Replay Project has caused staffing problems for existing behavioural programmes within the institution without causing them to fail to meet objectives.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	Allocating staff to the Replay Project has caused existing behavioural programmes within the institution to lose key staff and fail to meet objectives.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

4.2.10 Identify issues around data storage, access to and usage of data

Where the data collected by the Project is of a sensitive nature it is important to ensure that all due precautions are employed towards protecting this data from unauthorised persons. These precautions must encompass security measures around storage as well as the subsequent access to and usage of data. It is also important to ensure that data is made available to those with legal rights of access. The various responsibilities of the stakeholders regarding the treatment data sets emerging from the Replay Project are elaborated in a separate deliverable, D3.2, which may be accessed from the Project website.

Rubric level	Identify issues around data storage, access to and usage of data ***Policies concerning confidentiality of data related to the REPLAY consortium***	Please choose one option
Optimal	Data collected through REPLAY sessions is only submitted for processing through the password protected online database.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	Data collected through the REPLAY sessions is only submitted for processing to the REPLAY consortium.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	Data collected through the Replay gaming sessions is only submitted for processing to the Replay consortium during the duration of the Project.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	Data collected through the Replay gaming sessions is immediately submitted for processing to organisations/individuals other than the Replay consortium.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify issues around data storage, access to and usage of data ***Policies concerning internal confidentiality of data***	Please choose one option
Optimal	Data gathered through the REPLAY sessions is only made available to specifically authorized school staff through restricted entry to a password protected database.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	Distribution of data gathered through the REPLAY sessions is supervised to ensure that it is only made available to those specifically authorized to view it.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Semi-Functional	Data gathered through the REPLAY sessions is intended as only being seen by those specifically authorized to view it but this process is not supervised.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	Data gathered through the REPLAY sessions is intentionally made available to staff not specifically authorized to view it.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	**Identify issues around data storage, access to and usage of data** ***Policies concerning integrity of data***	**Please choose one option**
Optimal	Data submitted to the online REPLAY database is only modified by specifically authorized school staff through restricted entry to a password protected database.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	Data submitted to the online REPLAY database is supervised to ensure that it is only modified by those specifically authorized to view it.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	Data submitted to the online REPLAY database is intended as only being modified by those specifically authorized to access it but this process is not supervised.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	Data submitted to the online REPLAY database is intentionally made available for modification to staff not specifically authorized to access it.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Rubric level	Identify issues around data storage, access to and usage of data *Policies concerning availability of data*	Please choose one option
Optimal	There is a clear procedure in place at the educational centre for granting parents/guardians access to data concerning their child, from the Replay sessions.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Functional	Data from the REPLAY sessions is made available to parents/guardians.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Semi-Functional	Data from the REPLAY sessions is in some cases made available to parents/guardians.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree
Inadequate	Data from the REPLAY sessions is never made available to parents/guardians.	1. Neither agree nor disagree 2. Agree 3. Strongly Agree

Conclusion

All of the indicators and associated procedures outlined here will now be converted into a set of assessment tools to be managed online that will form the basis of the assessment process to be carried out as part of Task 4.3 – Develop the operational assessment process and tools, assessment launch and analysis. These tools will fully evaluated by the Consortium prior to the distribution of assessment instructions to all participants in the assessment procedure at the three centres in Spain, UK and Romania.

The combined data sets gathered by the Replay consortium at the three test centres in the UK, Spain and Romania will provide a clear overall examination of the socio-organisational and ethical challenges associated with implementing the novel gameplay of the Replay technology in a psycho pedagogical environment. These challenges once identified will form the basis of the recommendations for Replay take up strategies to be produced in D4.3 – Final Report on Socio-Organizational, and Ethical Impacts.