



DELIVERABLE REPORT

D10.2.1

“Cooperation on report on the project’s DGEI clustering first workshop”

MASELTOV

Mobile Assistance for Social Inclusion and Empowerment of Immigrants with
Persuasive Learning Technologies and Social Network Services

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| CO | Confidential, only for members of the consortium (including the Commission Services) | |

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EXECUTIVE SUMMARY

MASELTOV will perform clustering activities with other projects in the same area for the purpose of enhancing the ICT innovation, in particular with respect to serious games for social inclusion and the development of appropriate learning success indicators. Clustering shall result in novel insights into ICT serious gaming for the social inclusion of disadvantaged groups. The partners will seek further potential synergies within the objective. We aim to share efforts in particular to increase the critical-mass and complementarities for increasing the chances of impact. The following items are available for clustering:

- comparison of approaches and coverage of types and context-of-use of the type of technologies/techniques planned (for complementarities and/or comparison),
- exchange of user requirements (end-users, third-parties, other developers),
- exchange of validation methodologies and impact indicators for ensuring comparability and consolidation of results,
- exchange and consolidation of lessons learnt,
- joint dissemination efforts, and
- joint standardisation efforts.

In this **first deliverable**, results from the first DGEI clustering workshop are presented, aiming to analyse the potential for concrete clustering and synergies early in the project.

The report is **structured** as follows. Section 1 provides an introduction into the general ideas on the clustering activities. Section 2 presents the participants of workshop and the agenda. Section 3 presents the projects and its objectives while Section 4 presents its participating organisations, and Section 5 the DGEI clustering activities as accompanied by the European Commission. Section 6 identifies the working groups at the meeting site. Section 7 presents the results on clustering activities as worked out by the working groups. Section 8 presents the work plan, and Section 9 provides a conclusion.

1. INTRODUCTION

Three FP7-ICT projects aim at developing Digital Games for Empowerment and Inclusion (DGEI): ASC-Inclusion, MASELTOV and TARDIS.

The ASC-Inclusion project aims to create an internet-based platform that will assist children with Autism Spectrum Condition (ASC) to improve their socio-emotional communication skills. The project will attend both to the recognition and the expression of socio-emotional cues, aiming to provide an interactive-game where to give scores on the proto-typicality and on the naturalness of child's expressions. It will combine several state-of-the-art technologies in one comprehensive virtual world environment, combining voice, face and body gesture analysis, providing corrective feedback regarding the appropriateness of the child's expressions.

The MASELTOV project aims to develop innovative social computing services that motivate and support informal learning for the appropriation of highly relevant daily skills. A mobile assistant embeds these novel services that address activities towards the social inclusion of immigrants in a persuasive and most intuitive manner which is highlighted in MASELTOV with a representative application of most essential / beneficial information and learning services, such as ubiquitous language translation, navigation, administrative and emergency health services.

The TARDIS project aims to build a scenario-based serious-game simulation platform for young people not in employment, education or training (NEET) at risk of exclusion at the age of 16 to 25, to explore, practice and improve their social skills. TARDIS will facilitate the interaction through virtual agents (VAs) acting as recruiters in job interviews scenarios. TARDIS will be able to detect in real-time user's emotions and social attitudes through voice and facial expression recognition and to adapt the progress of the game and the behaviour virtual interlocutor's behaviour to the individual users. It will provide field practitioners with an intuitive authoring tool for designing appropriate interview scenarios and for setting agents' behaviours without the help of computer scientists. Furthermore, it will give practitioners a unique access to a systematic record of the specific difficulties that the users experience.

The three projects can be seen as complementary, because they share much in terms of their respective methodologies (user-centred iterative design), technical solutions (all three propose to rely on the serious gaming paradigm to deliver support and to motivate the users) and in terms of the context of the application (in all three projects the target population has special needs, either socially and economically determined, or neuro-developmentally conditioned).

To capitalise on the similarities between the three consortia, ASC-Inclusion, MASELTOV and TARDIS propose specific tasks to identify the potential and the best method for concrete clustering and synergies early in the projects. To enable this, a first closed workshop for all members of the three projects has been held in Brussels on 19 April 2012.

The workshop featured presentations of the different research groups and discussion about synergies, collaborations and clustering activities. The discussions has been organised around specific activities submitted a priori of the workshop through the DGEI wiki (<http://dgeiclustering.pbworks.com>) to ensure that the discussion was ripe and to the point and that the outcomes of the workshop are captured in a coherent manner.

The report is structured as follows: first, the list of participants to the workshop and the related agenda are given (Chapter 2). Then, the three projects are described with more details (Chapter 3) focusing on the main goals of each project in the DGEI cluster; next a presentation of each individual organization (Chapter 4) that joined the workshop is given. Chapter 5 comprises an introductory description of the work on DGEI at IPTS and IBBT, followed by the definition of the work groups (Chapter 6) and by a detailed description of the clustering activities that has been discussed during the workshop (Chapter 7). Last, the conclusions of the report are given in Chapter 8.

2. PARTICIPANTS AND AGENDA

This section enumerates the list of attendees and the agenda for the related clustering workshop. Table 1 shows the participants sorted by project and affiliation.

| Name | Project | Affiliation | Email |
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Table 1: *List of participants*

The DGEI clustering workshop agenda is shown in Table 2. It describes the actual schedule of the meeting, the main topics that has been discussed and the structure of the work groups and their related clustering items.

| | |
|--------------------|---|
| 09:35 | Welcome (Björn Schuller, Lucas Paletta, Nicolas Sabouret) |
| 09:40 | Short presentation of projects: ASC-Inclusion, MASELTOV, TARDIS (coordinators) |
| 10:30 | COFFEE BREAK |
| 10:55 | DGEI Clustering (IPTS, IBBT) <ul style="list-style-type: none">• Rational behind the work on DGEI at the IPTS• Workplan for putting together a policy vision and roadmap• Results and ideas from the Seville workshop and commissioned report (James Stewart (IPTS), Jav Van Looy (IBBT)) |
| 12:15 | Presentation of individual organizations I (incl. case studies in the field w.r.t. DGEI) (3 organisations) |
| 12:30 | LUNCH at the conference site |
| 13:40 | Presentation of individual organizations II (incl. case studies in the field w.r.t. DGEI) 24 organisations |
| Work groups | |
| 15:30 | Short intro, formation of work groups, (coordinators) |
| 15:40 | Group work I <ol style="list-style-type: none">1. Common dissemination channels2. Common exploitation3. Common success indicators4. Exchange of lessons learned5. Exchange of user requirements6. Exchange of validation methodologies (6 groups à ~5 persons with 1 rapporteur) |
| 16:20 | COFFEE BREAK |
| 16:40 | Group work II <ol style="list-style-type: none">1. Sharing of engineering requirements2. Sharing of methodologies3. Sharing of technical solutions4. Comparison of approaches (for complementarities and/or comparison)5. Organizing next DGEI clustering workshops (internal in M18 in Brussels, international in M30 - M33, etc.)6. Further clustering potential (e.g., GALA network) (6 groups à ~5 persons with 1 rapporteur) |
| 17:35 | Work group summaries (12 rapporteurs) |
| 18:40 | WORKSHOP END |
| 19:00 | Voluntary SOCIAL EVENT: DINNER |

Table 2: *Actual agenda*

3. DGEI CLUSTER'S PROJECTS

In this chapter a summary of each project in the DGEI cluster is given, with a detailed description of the main goals of the projects and their product concept.

3.1 ASC-INCLUSION

ASC-Inclusion – Integrated Internet-based Environment for Social Inclusion of Children with Autism Spectrum Conditions (ASC)

www.asc-inclusion.eu

ASC-Inclusion aims to create an internet-based platform that will assist children with ASC, and those interested in their inclusion, to improve their recognition and expression of socio-emotional cues. ASC-Inclusion will combine several state-of-the-art technologies in one comprehensive environment, including analysis of users' gestures, facial and vocal expressions, training through games, text chatting, animation, video and audio clips. The user's environment will be personalized, accounting for individual skills and challenges, sensory requirements, and increasing motivation through special interests. Carers will be offered their own supportive environment, including professional information, reports of child's progress and use of the system, chat rooms and forums for parents and therapists. Despite the innovative technologies involved, the ASC-Inclusion is aimed for home use, enabling users all around Europe to benefit for professional training, using standard home computing equipment. Matching the objective of the ICT inclusion call, ASC-Inclusion will aim at self-learning ICT solutions which take into consideration user profiling and feedback, in view to deliver personalised services and enhanced participation in social interaction and through it in education and work. Unlike past ICT solutions, like the Mind-reading [Golan and Baron-Cohen 2006] and the Transporters [Golan et al. 2010], the proposed project will attend both to the recognition and to the expression of socio-emotional cues.

| Part. no | Participant name | Member name |
|----------|--|-------------------|
| 1 | Technische Universität München (TUM) | Björn Schuller |
| 2 | The Chancellor, Masters And Scholars Of The University Of Cambridge (UCAM) | Simon Baron-Cohen |
| 3 | Bar Ilan University (BIU) | Ofer Golan |
| 4 | Compedia Software & Hardware Development Ltd (COMP) | Shai Newman |
| 5 | Universita Degli Studi Di Genova (UNIGE) | Antonio Camurri |
| 6 | Karolinska Institutet (KI) | Sven Bölte |
| 7 | Autisme-Europe (AE) | Aurélie Baranger |

Table 3: *List of ASC-Inclusion partners*

3.1.1 PRODUCT CONCEPT

As illustrated in Figure 1, the product consists of several subsystems that are integrated together to provide the user with a comprehensive, motivating experience.

Registration & user profiles:

Children and their carers will use a standard home computer with internet, microphone and a webcam. The children's parents, therapists or other intermediaries will enter the online virtual world Platform, register the child and fill in the user's profile with data that will help the system to generate a personalized interaction. Such data will include age, gender, areas of interest, and ability level in selected main areas of difficulties (from preselected elements). This profile will be kept in the Data Base as well as a log of User's interaction with the system. The User will then enter into the virtual world environment of the Platform, choose his "profile image" – an animated image created from predefined elements.

Face expressions, Body gestures and Voice analysis sub systems:

The three subsystems (face expressions, body gestures and voice) will analyse the user's state in real time and feed in to the Platform various parameters regarding the user's intentions and emotional state, as defined by his gestures and body language, facial and vocal expressions. These indicators will be used to adapt the system's behaviour towards the user (e.g., change the activity if the user appears bored), and as inputs for the emotional expression training system.

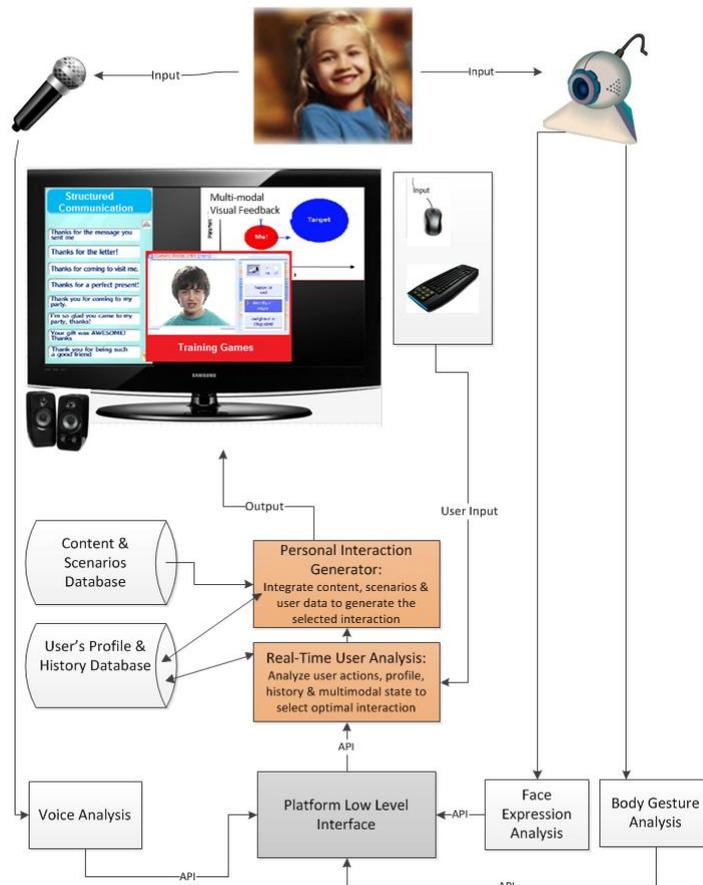


Figure 1: Product concept

Multimodal input integrated in the Real Time User Analysis Manager ("RTUM"):

As soon as the user enters the virtual world each of the subsystems will be requested by the Platform's RTUM module to start sending data on the user's state and any identified gestures, facial or vocal expressions. The user's data previously collected will be used as a base-line for better assessment. The RTUM will also give different weights for the subsystems' input, based on subsystems' evaluation results that might indicate, just for example, that a specific

subsystem (e.g. facial expressions) is more indicative in specific segments (e.g. older children).

The RTUM will receive the above high level multimodal data through a low level interface system that integrates and synchronizes the different subsystems, and handles the hardware aspects. The RTUM will suggest the right level and type of interaction suitable for the user, based on his profile, usage history (e.g., adjusting level of difficulty according to previous success level), user selections and location in the virtual world (e.g., specific area/type of activity) and user's emotional state, as reported by the subsystems (offering an activity that fits the user's current emotional state, e.g. a high level of *arousal* might trigger more easy-going, fun activities).

Personal Interaction Generator Module ("PIGM"):

Once the type and/or level of activity are suggested by the RTUM, the PIGM element of the Platform generates the selected activity for the specific user, based on the pre-defined scenarios, activities and content. These activities are integrated into the motivating virtual world.

The Virtual world:

The virtual world is part of the Platform and encapsulates all the interaction into a motivating coherent experience. On each progress the user will get positive feedback adjusted to his level, status and needs: animations, new fun games, collectable items (designed to meet systemizing interests of children with ASC) as well as virtual Coins that enable the user to get the things he likes for his virtual place within the virtual world.

Interactions' Types:

- Specific learning and training activities: training tutorials, games and activities, promoting the understanding of social situations, facial and vocal expressions & gestures recognition including multimodal training (according to user's level). Auditory and visual feedback will be provided.
- Simulations and integrated activities: In such activities the user will have to integrate his abilities in lifelike scenarios and select the appropriate response for the situation presented on the screen, using several modalities: verbal (select response from a large collection of pre-defined texts), vocal intonation (using a microphone), body language/gestures, and facial expressions.
- Safe predefined context sensitive test communication with peers, therapists, parents and smart NPC ("Non Playing Characters" i.e., manipulated automatically by the system) agents.
- Fun Activities – presented as positive feedbacks and also when the child is stressed or has failed in order to maintain motivation.

3.1.2 SOCIO-ECONOMIC IMPACT

The expected social impact includes:

1. Increased motivation and interest of children in socio-emotional phenomena.
2. Improvement in children's expressive emotional repertoire (including facial expressions, vocal intonation, body language and vocabulary)
3. Improvement in children's emotion recognition skills (from facial expressions, voice intonation, body language, and context)

4. Improvement in parents' socio-emotional awareness and socio-emotional mediation skills
5. Improvement in children's social skills and adaptive behavior at home and in school.

Future impact may include:

1. Improvement in children's social inclusion in and out of the educational system.
2. Decrease in reliance on professional support (e.g. speech and language pathologists, psychologists, special education teachers, tutors).
3. Increase in up to date evidence based professional service availability in rural areas in European countries.

Economic Impact of ASC-Inclusion

| | | |
|---|---------------------|---|
| <u>Costs of supporting children with ASC each year in UK (£million)</u> | <u>2700</u> | <u>Source: Economic costs of autism in UK, Martin Knapp, LSE</u> |
| <u>EU (27) population (million)</u> | <u>501</u> | <u>Source: Eurostat 2010</u> |
| <u>UK population (million)</u> | <u>62</u> | <u>Source: Eurostat 2010</u> |
| <u>Costs of supporting children with ASC each year in EU (£million)</u> | 21818 | <u>Assumes same amount of spend per child in each EU country as in the UK</u> |
| <u>Percentage of EU population aged 5 to 10 years that ASC-Inclusion service reaches (year 1)</u> | <u>5%</u> | <u>Estimated market reach</u> |
| <u>Average savings attributable to users of ASC Inclusion</u> | <u>10%</u> | <u>Based on service making users more independent;</u> |
| <u>Annual saving in year 1 (£million)</u> | <u>109</u> | |
| <u>Annual saving in year 1 (Million Euros)</u> | <u>120</u> | |
| <u>Share of population that is 0-19 years of age in EU</u> | <u>22%</u> | <u>Source: Eurostat 2006</u> |
| <u>5-10 year old population as percentage of 0-19</u> | <u>26%</u> | <u>Estimate</u> |
| <u>Share of population with ASC</u> | <u>1%</u> | |
| <u>Size of target EU users</u> | <u>290053</u> | |
| <u>Number users of ASC-Inclusion service in year 1 (expected)</u> | <u>14503</u> | |
| <u>Year 1 is intended to be the first year after the end of the project</u> | | |

General information on the EU people that are on the Autism Spectrum

Autism Spectrum Conditions (ASC) is a significant public health challenge. According to the European **Autism Action 2010** conference report "Current estimates are that approximately 1% of the US and UK population have ASC, which, if one were to simplify, means five million people in EU member countries are on the autism spectrum. These current estimates show that ASC is more common than childhood cancer, juvenile diabetes and paediatric AIDS combined. European countries and the European Commission should act now to alleviate some of the challenges that are faced by people with ASC and their families. The annual economic costs of ASC for the UK economy alone are over €32bn but with the right

services and opportunities individuals with ASD and their families can become important contributors to society.”

The need and uniqueness of the Project

According to "Training Modules For Policy Decision Makers And Professionals Of Services For Persons With Autism Spectrum Disorders (ASD) And Other Complex Dependency Needs Disabilities" created by Autism-Europe AISBL, Brussels 2007, "New educational tools: Fairly little research is made in this field, teachers have developed excellent methods but through long trial and error and field experience. For techniques such as computer-assisted education, there is very little pluri-disciplinary research integrating the current knowledge on autism.

Research on new technologies in the domain of technological aids destined to people with an intellectual disability, researches endeavoured at the level of serious university teams or in private laboratories are rare, in contrast with the relative abundance of research concerning support technologies for people with sensory or motor disabilities".

This project will supply the unmet important needs of ASC children (as well as other populations like ADHD and socially neglected children).

3.2 MASELTOV

MASELTOV - Mobile Assistance for Social Inclusion and Empowerment of Immigrants with Persuasive Learning Technologies and Social Network Services

www.maseltoev.eu

MASELTOV recognises the major risks for social exclusion of immigrants from the European information society and identifies the huge **potential of mobile services for promoting integration and cultural diversity in Europe.**

Mobile, everywhere/everytime, persuasive assistance is crucial for more efficient and sustainable support of immigrants. MASELTOV researches and develops novel ICT instruments in an interdisciplinary consortium with the key objective to facilitate and foster local community building, raising consciousness and knowledge for the bridging of cultural differences.

MASELTOV realises this project goal via the development of **innovative social computing services** that motivate and support informal learning for the appropriation of highly relevant daily skills. A mobile assistant embeds these novel services that address activities towards the social inclusion of immigrants in a persuasive and most intuitive manner which is highlighted in MASELTOV with a representative application of most essential / beneficial information and learning services such as ubiquitous language translation, navigation, administrative and emergency health services.

MASELTOV researches for and develops **enabling technologies** with the industrial potential to easily exploit and scale up the prototypical user shares within the embedment of already existing successful services with worldwide user coverage. The project with its scientifically, technically and socially relevant results will enable a massive social impact on the future with respect to more cooperative – more successful – integration of millions of (im)migrants living together with hundreds of millions cohabitating European citizens. Figure 2 shows the service architecture describing the community and social network services and the application of multisensory context awareness that the mobile assistant envisions.

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Table 4: List of MASELTOV partners

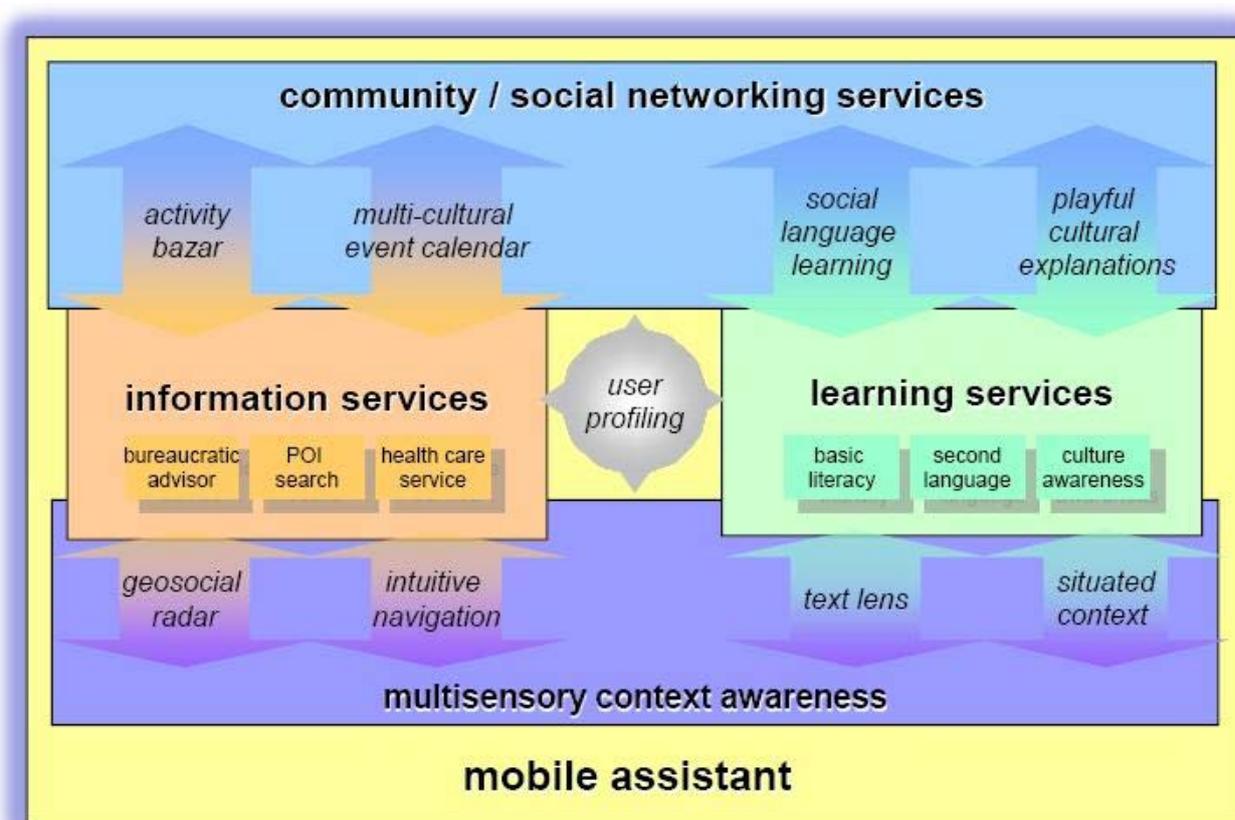


Figure 2: MASELTOV service architecture

MASELTOV intends to motivate immigrants with **persuasive learning services** for the appropriation of the local second language, playful learning of cultural understanding and basic literacy. MASELTOV takes advantage of the interplay between learning and social computing in order to apply learning (i) through communication as well as (ii) in the situated context, i.e., right at the spot where it matters, therefore jointly reinforcing the learning effect and the fostering of social inclusion.

3.3 TARDIS

TARDIS – Training young Adult’s regulation of emotions and Development of social Interaction Skills

tardis.lip6.fr

The number of young people not in employment, education or training (NEET) is increasing across Europe. Current research reveals that NEETs often lack self-confidence and the essential social skills needed to seek and secure employment. Youth inclusion associations across Europe provide social coaching programmes, in order to help young people acquire and improve their social competencies. However, it is an expensive and time-consuming approach that relies on the availability of trained practitioners as well as the willingness of the young people to engage in exploring their social strengths and weakness in front of their peers and practitioners. Digital technologies such as serious-games offer the advantage of repeatable experience that can be modulated to suit the individual needs of the young people. Additionally, such technologies are intrinsically motivating to the young and carry the potential of removing the many barriers that real-life situations may pose, in particular the stress associated with engaging in unfamiliar interactions with others.

| Part. no | Participant name | Member name |
|----------|--|-----------------------|
| 1 | Université Pierre et Marie Curie – Paris 6 (UPMC) | Nicolas Sabouret |
| 2 | Deutsches Forschungszentrum für Künstliche Intelligenz GmbH (DFKI) | Patrick Gebhard |
| 3 | Institute of Education (IOE) | Kaška Porayska-Pomsta |
| 4 | Institut Télécom (IT) | Catherine Pelachaud |
| 5 | Mission Locale Val d'Oise Est (MLVOE) | Fred Ritter |
| 6 | Universität Augsburg (UAU) | Elisabeth André |
| 7 | Universiteit Utrecht (UU) | Mark Overmars |
| 8 | Wizarbox | David Vesa Cohen |

Table 5: *List of TARDIS partners*

TARDIS aims to build a scenario-based serious-game simulation platform for young people at risk of exclusion, aged 16-25, to explore, practice and improve their social skills. TARDIS will facilitate the interaction through virtual agents (VAs) acting as recruiters in job interviews scenarios. The VAs are designed to deliver realistic socio-emotional interactions and are credible, yet tireless interlocutors. TARDIS exploits the unique affordances of digital technology, by creating an environment in which the quality and the quantity of emotional display by the agents can be modulated to scaffold the young trainees through a diverse range of possible interview situations. The scenarios are co-designed with experienced practitioners in several European countries in order to ensure their relevance to the different individuals across a number of cultural contexts.

TARDIS offers three major innovations. First, it will be able to detect in real-time user’s emotions and social attitudes through voice and facial expression recognition, and to adapt the progress of the game and the behaviour virtual interlocutor’s behaviour to the individual users. Second, it will provide field practitioners with an intuitive authoring tool for designing appropriate interview scenarios and for setting agents’ behaviours without the help of computer scientists. Third, it will give practitioners a unique access to a systematic record of the specific difficulties that the users experience. This will offer new instruments for practitioners to measure individual’s progress in emotion regulation and social skill acquisition, thus facilitating reflection on their own practice and enabling a more flexible and personalised coaching for young people at risk of social exclusion.

Figure 3 shows the platform architecture describing the interactions between the modules within the Open Source platform.

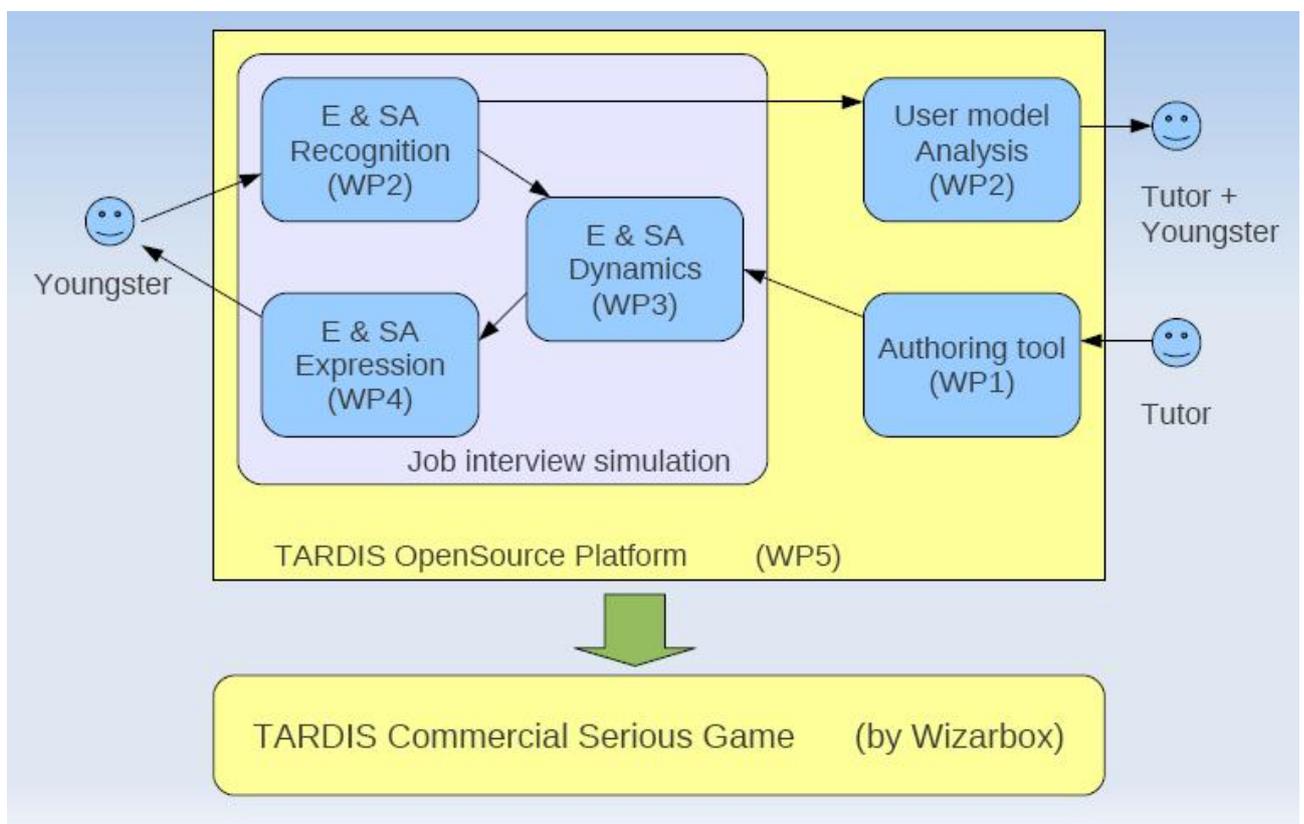


Figure 3: *TARDIS platform architecture*

4. INDIVIDUAL ORGANIZATIONS

This Chapter comprises a brief description for each organization that attended the workshop. All sites of ASC-Inclusion, MASELTOV and TARDIS are introduced respectively, in Section 4.1, 4.2 and 4.3.

4.1 ASC-INCLUSION

4.1.1 TECHNISCHE UNIVERSITÄT MÜNCHEN (TUM)

Munich's University of Technology is an upper-to-medium-size university by German standards (approx. 25,000 students, 440 professors, 8,000 total staff). Its total turnover regarding research grants amounts to approx. 100 million Euro annually, thus ranking the TUM at first place among German universities and making it one of the leading technical universities in Germany and Europe. It has recently been granted the status of one of the first three German Excellence Universities. Its *Department of Electrical Engineering and Information Technology* consists of 20 institutes, making it one of the largest of the university. The *Institute for Human-Machine Communication* within this department consists of a staff of 2 permanent senior researchers, and varying between 15 and 20 Ph.D. students. It deals with the fundamentals of a widely intuitive, natural, and therefore emotion sensitive and multimodal interaction between humans and complex information processing systems. The institute has specialized on the most promising areas of research in this field as affective computing, multimodal integration, usability engineering, speech recognition and natural language understanding, face and gesture recognition, and adaptation and learning strategies. Some outstanding research projects related to the aimed at project cover interest recognition in human-robot interaction by integration of acoustics, linguistics, and mimics, adaptive dialogue techniques for an emotion aware, multimodal user interface of infotainment entities in the car, the enhancement of the robustness of automatic speech recognition systems, and adaptation for intelligent user interfaces. The institute is well renowned for its innovative work on multimodal interaction and has a long tradition in affective computing, with excellent expertise and know-how concerning research and technology in this domain. In this respect, the department represents one of Germany's largest institutions and one of the most active and renowned laboratories in human computer interaction and multimedia information processing.

Actual and past EU projects: ASC-Inclusion, PROMETHEUS, SEMAINE, AMIDA, AMI, M4, SAFEE, FGnet, CATCH-2004, and ALERT.

Role in ASC-Inclusion: TUM is the project coordinator. TUM will be in charge of the vocal emotional expression analyser based on real-time extraction and interpretation of suitable speech features.

Attendees at the workshop: Björn Schuller, Erik Marchi

4.1.2 THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE (UCAM)

Autism Research Centre (UCAM-ARC)

The Autism Research Centre (www.autismresearchcentre.com) at Cambridge University has 6 main research programs focused on autism spectrum conditions (ASC). These are: (a) Perception and Cognition (investigating social and non-social cognition and sensory processing); (b) Neuroscience (using functional magnetic resonance imaging [fMRI], diffusion tensor imaging [DTI], and electroencephalography [EEG]); (c) Genetics and Proteomics (conducting candidate gene association studies, full genome pooled association studies, and mass spectrometry); (d) Hormones (testing the role of foetal testosterone (fT) in typical neurocognitive sexual dimorphism and as a causal factor for ASC); (e) Screening and Diagnosis (evaluating screening instruments in infancy and childhood); and (f) Intervention (conducting 'treatment'-trials). The ARC is part of the Clinical School (Department of Psychiatry) at the University of Cambridge and brings together over 30 active research staff (including doctoral students). It is also part of the NIHR (National Institute of Health

Research) CLAHRC (Collaboration in Leadership in Applied Health Research and Care) for Mental Health in the NHS Cambridgeshire and Peterborough Foundation Trust.

Our magnetic resonance imaging (MRI) studies take place through the Brain Mapping Unit at the Wolfson Brain Imaging Centre (WBIC), Cambridge, with support from the MRC Cognition and Brain Sciences Unit (CBU). We are part of the MRC-AIMS Consortium (Autism Imaging Multicentre Study) that has a special focus on functional and structural MRI, and DTI. Our cognitive studies take place in the Department of Experimental Psychology, Cambridge. The ARC contributes to the graduate education program in cognitive neuroscience. The ARC has funding from a range of governmental (e.g., Medical Research Council) and charitable (e.g., The Wellcome Trust) bodies.

Role in ASC-Inclusion: UCAM (Autism Research Centre) will be in charge of identifying the content, creating the content and validating it. Furthermore the world renowned ASC expert, Prof. Simon Baron-Cohen, will be the leader of the psychological team.

Attendees at the workshop: Helen O'Reilly

Computer Laboratory (UCAM-CL)

The Computer Laboratory at the University of Cambridge has been conducting research in Computer Science since 1937, and has consistently achieved the highest rating in all the UK Research Assessment Exercises. Within the Computer Laboratory, the Rainbow Research Group has been undertaking research in computer graphics, human-computer interaction, and applications for 45 years. Contributions have ranged from display hardware through algorithms to applications in computer-aided design and animation. Recent work has included the Cambridge autostereo display, subdivision curves and surfaces, psychology-based human-figure animation, tabletop interfaces and affective interaction. The research group today consists of some 20 people and provides a friendly and supportive environment. The research facilities include a 40m² experimental laboratory equipped with stereo video projection, a six-projector tabletop display, a 27-DoF Hanson Robotics HumanKind conversational robot, a 10-camera Vicon motion capture system, a Tobii X120 eye tracker and Mind Media physiological monitoring equipment. The group also has a smaller room with an observation facility for controlled experiments and a room with acoustic treatment for video conferencing. The Computer Laboratory has a history of technological transfer to industry. The local companies ASD Systems and Advanced Rendering Technologies, for example, were both founded as a result of research in the Rainbow Group.

Role in ASC-Inclusion: UCAM (Computer Laboratory) will lead WP2 where they will develop, analyse and test an online facial expression recognition system.

Attendees at the workshop: Peter Robinson, Ian Davies

4.1.3 BAR ILAN UNIVERSITY (BIU)

Bar-Ilan University is the second largest research university in Israel, with a student population of approximately 22,500 at the main campus in Ramat-Gan, and at the four regional colleges. This figure includes 6,000 young researchers of which 1,800 are PhD students. The university offers high-level academic studies and the development of advanced research within the framework of faculties, departments, multi-disciplinary centres and research centres. Aiming to excel in research, in recent years Bar-Ilan University has placed major emphasis on expanding its research activities and advanced studies, by substantially increasing the number of research students via Presidential and other scholarships. The university has also developed unique interdisciplinary study programs and has intensified research and instruction in fields that are at the forefront of sciences, such as computational

biology, biotechnology, nanotechnology, brain and more. Bar-Ilan University has been involved in the Framework Programme since FP4 both as a partner and coordinator, managing more than 100 projects.

Role in ASC-Inclusion: BIU will contribute by leading WP7 in which it will evaluate the project's psychological and clinical effectiveness, including effectiveness of the platform, each of the subsystems and the project as a whole. Furthermore BIU will participate in WP1, WP5, WP6 and WP8 where they will contribute their vast knowledge regarding using ICT to assist people with ASC.

Attendees at the workshop: Shahar Tal

4.1.4 COMPEDIA SOFTWARE & HARDWARE DEVELOPMENT LTD (COMP)

Compedia is a global leader in the genre of educational software for children and young adults and has been selling millions of educational products to over 50 countries worldwide since 1988. The company has cooperation agreements with media companies like MGM, HIT, Jim Henson and others in developing and publishing branded products. Compedia is one of the leading international developers and publishers of cross platform interactive educational content. The company develops and publishes a variety of PC Games, ITV channel, runs rich personalized educational on-line virtual worlds, as well as creates custom made institutional versions of its software for educational markets.

The products are created with close cooperation with top educators and have an internal PhD specialized in computerized learning programs that supervises the R&D activities. The company has produced and developed over 80 award winning titles that have been sold in 38 languages through leading distributors to retailers like Wal-Mart, Fnac, Virgin, Staples, CompUSA, Office Depot, Sam's Club, Fry's, Tesco, Camelot-Info, Auchan, MediaMarkt, Manor, Corte Ingles, Carrefour, and many more. Using a vast amount of content, specially developed for internet usage, Compedia has developed rich and advanced Broadband virtual worlds for children. The company has implemented advanced cutting edge technologies and concepts in order to enable a fully interactive and rich online experience. In addition, Compedia has successfully developed school versions of its software and is experienced in dissemination and distribution to educational channels. The school edition's range covers learning areas such as math, English, inventive thinking and creativity. The School version software is supplemented with teacher guides and worksheets to follow up student's progress.

Role in ASC-Inclusion: The role is to lead WP5 the user interaction platform that connects all the elements together to create the user analysis and user interaction and communication as part of a virtual world and to lead WP8 (exploitation and dissemination) in addition to other contributions in design, specification, management and content creation (especially the animation and screens of the virtual world)

Attendees at the workshop: Shai Newman

4.1.5 UNIVERSITA DEGLI STUDI DI GENOVA (UNIGE)

The Università degli Studi di Genova. Casa Paganini - InfoMus Lab (www.infomus.org) – established in 1984 at DIST (Dept. of Communications, Computer and Systems Science, Faculty of Engineering) - carries on scientific research on multimedia systems, human-computer interaction, computational models of human non-verbal behaviour, and design, development of multimodal interfaces and interactive multimedia systems. Research includes multimodal interactive systems integrating computational models of non-verbal expressive communication and social signal processing. InfoMus developed the EyesWeb open software platform (www.eyesweb.org) adopted in research as well as in education and industry applications, in therapy and rehabilitation applications in the framework of the EU IST

Project MEDiate, and in the EU IST CARE HERE Project for T&R of Parkinson disease. It has been adopted in several EU projects in the IST and ICT Programs (MEGA, CARE-HERE, MEDiate, TAICHI, SAME, I-SEARCH, FET SIEMPRE, MIROR). InfoMus has been Coordinator of the EU Project IST MEGA (Multisensory Expressive Gesture Applications), and participated as partner in the EU ICT Coordination Action CAPSIL (on ICT for independent living), the EU-IST Project TAI-CHI (on multimodal tangible acoustic interfaces), the EU-IST NoE ENACTIVE (on enactive multimodal interfaces) and HUMAINE (on affective computing), the EU-IST Coordination Action S2S₂, the EU-CRAFT Project U-CREATE (on technology transfer of EyesWeb to museum and edutainment industry), and the IST projects on therapy and rehabilitation CARE HERE (on Parkinson disease) and MEDiate (on autism). InfoMus is Coordinator of the EU ICT Projects FET SIEMPRE and SAME, and is partner of the EU ICT Projects I-SEARCH (on multimodal search engines) and MIROR (on interactive multimedia systems for music pedagogy), and of EU Culture 2007 COMEDIA (on networked performance).

Role in ASC-Inclusion: UNIGE will work on body gesture analysis (WP4), on the development of models, techniques, and in software modules for the analysis of non-verbal expressive gesture, and will contribute to the development of the project platform (WP5), to integrate multimodal interactive systems for supporting ASC children inclusion starting from the experience matured with the EyesWeb platform. UNIGE will also participate in the design and set-up of experiments. Finally, the site of Casa Paganini will be used for possible dissemination activities (e.g., public events) (WP8).

Attendees at the workshop: Paolo Coletta, Stefano Piana

4.1.6 KAROLINSKA INSTITUTET (KI)

Karolinska Institutet Center of Neurodevelopmental Disorders (KI) (www.ki.se/KI) is a competence centre for research, education and development in child and adolescent neurodevelopmental psychopathology, with a special focus on autism spectrum conditions. KI is located at Karolinska Institutet, Europe's highest ranked university in Clinical Medicine according to Academic Ranking of World Universities (by Shanghai Jiao Tong University). It is Sweden's largest centre for research, accounting for 40 percent of the medical academic research conducted nationwide. KI's mission is to link basic science to clinical practice in order to maximize clinical and patient gains and to establish a network of excellent research collaborations in Sweden and abroad. Among KI's objectives are to evaluate current and novel forms of treatment and inclusion as well as to develop and coordinate the spreading of knowledge to patients, their parents and relatives through education and other forms of information such as the internet. KI is networked with clinical departments in Stockholm County (population 2 million), among them the Habilitation Centers (offering a broad range of services to increase inclusion) and the center for psychiatry research, both successfully conducting internet-based intervention projects. Aside from its director (applicant), KI currently employs 6 researchers (2 senior, 3 post doc, 3 PhD students), all engaged in basic or applied clinical research on neurodevelopmental disorders. KI is currently involved in several European initiatives, among them COST BM1004 "Enhancing the Scientific Study of Early Autism"; others being in preparation (3rd IMI call: "Translational Endpoints in Autism"). In addition, KI is a member of the international Autism Genome Project (www.autismgenome.org).

Role in ASC-Inclusion: KI will advise on the creation of the ASC inclusion platform, later adapt the system and content to Swedish language and culture, and evaluate in Sweden children with HF ASC and their families.

Attendees at the workshop: Daniel Lundqvist

4.1.7 AUTISM-EUROPE (AE)

Autism-Europe is an international association whose main objective is to advance the rights of persons with autism and their families and to help them improve their quality of life. Autism-Europe's overarching mission is indeed to improve the quality of life of all persons with autism and their families by promoting and defending their rights. This is achieved through:

- Representing persons with autism towards all European institutions
- Promoting awareness on the appropriate care, education, and well-being of persons with autism
- Promoting the exchange of information, good practices and experience.

Autism-Europe is a European network which ensures effective liaison between approximately 80 member associations of parents of persons with autism in 30 European countries, governments and European and international institutions. In order to implement its objectives, Autism-Europe has built strategic alliances with social partners to maximise its impact on EU policies. Autism-Europe is a founding member and cooperates with the European Disability Forum and the Platform of European Social NGOs. Autism-Europe has also established a structured dialogue with the European Institutions of the European Union, the Council of Europe, as well as with the World Health Organisation. Autism-Europe has already participated in a number of European transnational projects, notably in the field of Lifelong Learning (Grundtvig). Autism-Europe also receives support for its running costs from the Progress 2007- 2013 programme of the European Commission.

Role in ASC-Inclusion: Autism-Europe will be involved in the dissemination activities of the project. It will use its dissemination channels to give visibility to the project at the EU level. Autism-Europe will for example publish regular updates on its website, including in its online Newsletters as well as articles in the LINK magazine, and use the opportunity of its events to inform stakeholders about the progress and results of the project. Autism-Europe benefits from a wide audience across Europe including member associations, ENGOS, EU institutions, academics, MEPs and other interested stakeholders.

Attendees at the workshop: Aurelie Baranger, Nikki Sullings

4.2 MASELTOV

4.2.1 JOANNEUM RESEARCH FORSCHUNGSGESELLSCHAFT MBH (JR)

JOANNEUM RESEARCH (JR) is one of the largest non-university research institutions and important focal point of scientific research and economy in Austria. The highly qualified staff of more than 400 employees is working in 5 large research institutes (DIGITAL, MATERIALS, HEALTH, RESSOURCES, POLICIES) in all sectors of innovation, both at national and international levels. The role as an innovative partner is reflected in the wide range of services: apart from applied research and development for small and medium-sized enterprises JOANNEUM RESEARCH offers custom-designed technical business consulting and vast expertise in interdisciplinary management of complex research contracts at a national and international level. *DIGITAL - Institute for Information and Communication Technologies* specializes in image, video and acoustic signal processing together with web and internet technologies, remote sensing, and communication and navigation technologies. These technologies are implemented in hardware and software development and application-oriented solutions using scientifically solid methods. The highly qualified staff of more than 140 employees is working in 5 research groups. The research group *Remote Sensing and Geoinformation* with more than 40 academic employees is an internationally recognized

center of excellence for R&D on sensor systems of satellites, airplanes, robots or mobile systems. Its experts with the thematic focus *Mobile Vision and Multisensory Applications* (MOBVIS) perform applied research and applications in the fields of mobile multisensory context awareness, AI based vision for mobile vision services and mobile mapping solutions, multisensory usability engineering, geo-contextual computing, robotics and visual surveillance. The research activities are realized in frame of EU, ESA, and national frameworks, while prototypical developments for the market are realized in close co-operation with international and local industry.

Participation in relevant projects. EC: MOBVIS, MARFT, DETECT, ASSIST, EuCogII, euCognition, ECVision. National: MARIA, FACTS, DIAFIT, LOOKAT, Captain Kirk, ASF Cognitive Vision.

Role in MASELTOV: Coordination (WP1), system specification and integration (WP3), multisensory usability engineering, multisensory context awareness (WP4), mobile assistance and navigation (WP6), dissemination and exploitation activities (WP10).

Attendees at the workshop: Lucas Paletta

4.2.2 CENTRE FOR USABILITY RESEARCH AND ENGINEERING (CURE)

CURE is one of Europe's leading organizations in the area of Human-Computer Interaction (HCI), User Experience Research, User Interface Design, User-Centered Design, Usability Engineering, and Next Generation Interfaces. Since 1999 CURE acts as an independent, non-profit research organization. CURE comprises a highly interdisciplinary team with diverse skills, assembled from a variety of disciplines such as computer science, psychology, sociology, anthropology, didactics, design, communication science and management science. The goal of CURE's work is to align computer technologies to the needs of people in the most suitable way. CURE applies and introduces a wide range of methodologies to analyze and design for the right usability and the optimal user experience (UX) to embrace the users' social, emotional and ergonomic requirements. CURE is equipped with leading-edge user experience research laboratories comprising the full range of the most advanced research and technology demonstration facilities. The laboratories have been set up to support the entire development cycle of applications, services and products. All lab rooms are connected and thus allow various and flexible studies and observations. These include precise usability & user experience tests (e.g. web, software, mobile systems, experience rooms) under controlled conditions and observation, context-specific studies (e.g. home media), physiological measurement, outdoor studies, focus groups, eye tracking, mouse tracking and clickstream analysis, and rapid experience and interface prototyping.

Participation in relevant projects: Within FP7 CURE is currently coordinating two projects (HERMES, uTRUSTit) and is a partner in four other projects (CHRONIOUS, CompanionAble, PICOS, PrimeLife). These international projects are focused on Persuasive Interfaces, multi-channel and location based systems, intelligent user interfaces, knowledge and innovation management. CURE is also taking part in five international Ambient Assisted Living (AAL) projects with a focus on user acceptance of technology. Further CURE has gained expertise in e-inclusion, HCI & Privacy, and methodologies of energy-related feedback to end users.

Role in MASELTOV: requirements & service scenarios, user interaction design (WP2), evaluation and field trials (WP9), dissemination and exploitation activities (WP10).

Attendees at the workshop: Jan Bobeth

4.2.3 ATHENS INFORMATION TECHNOLOGY (AIT)

Athens Information Technology (AIT, <http://www.ait.edu.gr>), an internationally-renowned education and research center in the fields of information technology, telecommunications, and innovation management, was founded in 2002 by the INTRACOM group of companies. To that extend AIT has been collaborating with Carnegie Mellon University (CMU) and the Information Networking Institute (INI) of CMU to offer a joint Master in Information Networking (MSIN). A second collaboration with Aalborg University and the Center for TeleInfrastruktur (CTiF) resulted into a joint PhD program. AIT has strong relationships with the global IT and networking industry, as well as with the major IT and telecom industries in Greece. The last three years AIT has signed 34 research contracts, 11 of which are industrial contracts and the rest are contracts with the European Commission (19 currently running projects), the European Defense Agency and the Greek Secretariat for Research and Technology. The relevant budget amounts to 8MEuro. The research work is performed by 40 academics and supported by a properly staffed Project Office. AIT participates in CREATURE through its Autonomic and Grid Computing Group (AGC). Research at AGC relevant to the project is in signal processing, especially extracting context from image, sound and video. AGC research is carried out in a state-of-the-art laboratory that integrates visual and time-of-flight cameras with microphones in an environment for audiovisual processing and application-building. Research results in this field have been published in numerous journal publications and have been featured in regional and international media and events.

Role in MASELTOV: Content abstraction and database generation, recommender systems on the basis of multisensory context awareness, user profiling, and privacy and trust (WP5).

Attendees at the workshop: Lazaros Polymenakos

4.2.4 FUNDACIÓ PER A LA UNIVERSITAT OBERTA DE CATALUNYA (UOC)

The mission of the Fundació per a la Universitat Oberta de Catalunya (UOC) is to provide people with lifelong learning and education opportunities. The aim is to help individuals meet their learning needs and provide them with full access to knowledge, above and beyond the usual scheduling and location constraints.

IN3 (Internet Interdisciplinary Institute) is UOC's interdisciplinary research centre. It studies the adoption and use of Information and Communication Technology (ICT); its effects on people, organisations and society; as well as its economic, social and political implications; and the influence such technology has on the changes taking place in the move from the industrial to the information society and the knowledge economy.

Migration and Network Society research program: The current migration patterns can only be understood in the context of a globally connected world. This connection entails constant and intense communication flows and networks. Communication becomes a core element between origin societies, potential migrants, host cultures and migratory networks. The major aim of the MNS program is to analyze the effects of interconnection on migration and, more specifically, the role of IT and communication networks in migration contexts. A typical topic for this program will be ICTs as a source of new opportunities for immigrants.

Role in MASELTOV: Acquisition of complete background on ICT and migration in Europe including workshop organization, sociological research and studies on immigrants' appropriation and use of mobile phones for MASELTOV's objectives (WP2).

Attendees at the workshop: --

4.2.5 THE OPEN UNIVERSITY (OU)

The Open University defines its mission as "open to people, places, methods and ideas". It promotes educational opportunity and social justice by providing high-quality university education to all who wish to realise their ambitions and fulfil their potential. Through academic research, pedagogic innovation and collaborative partnership it seeks to be a world leader in the design, content and delivery of supported open and distance learning. Its many initiatives, including "Open Research Online" (which makes available the research output of its staff to wider publics), "OpenLearn" (which makes available its world-renowned teaching materials, some of which are produced in association with the BBC, to wider publics) and "Cloudworks" (a social networking and knowledge sharing site) demonstrate the Open University's leadership in innovative knowledge production and dissemination.

CREET (the Centre for Education and Educational Technology) at The Open University is one of the leading education research units in the UK. It is an internationally respected centre of excellence, pursuing innovative and rigorous research that influences policy and practice. CREET research is multidisciplinary and is united by:

- a focus on learning through diverse media in a wide range of social, cultural and disciplinary settings;
- a radical, challenging approach to established orthodoxies in policy, pedagogy, theory and research methods;
- a major thread of socio-cultural theorising across four themes, two of which are 'technology-enhanced learning and pedagogy' and 'literacies, applied linguistics and languages'

CREET has a number of research groups within it, including the Technology and Learning Research Group (researching online, distributed and mobile learning) and INTELLECT (researching independent and technology-enhanced learning of languages and cultures). More information about CREET: <http://creet.open.ac.uk/>

Researchers in the university's Institute of Educational Technology are members of CREET. The Institute also houses a new Ambient Technologies Lab, which includes state-of-the-art facilities for usability and accessibility studies, and for building pervasive learning scenarios, with the help of specialist support staff; these facilities will be available to the MASELTOV project as required.

Participation in relevant projects. EC: MOBILEARN, EU4ALL, MOTILL, STELLAR. National: PI project, ERA, Bletchley Park Text, SUBTLE, SocialLearn, iTunesU.

Role in MASELTOV: Coordination of scientific aspects in mobile learning (WP1), development of a general mobile learning framework including R&D on metrics for evaluative feedback (WP7).

Attendees at the workshop: Agnes Kukulska-Hulme

4.2.6 COVENTRY UNIVERSITY (COV)

The Serious Games Institute was set up at a time of step change in the consideration of games technologies, computer modelling simulations and the use of digital interactive media to support non-leisure-based activities. At a time of rapid changes in the uses of these relatively new technologies it is important to accompany forays into using these more socially-based technologies with timely research and development.

The Serious Games Institute Research & Development Group is providing leading edge research and development in support of a wide range of serious games applications and virtual world technologies. Current research is focusing upon applications in the areas of health, education and environment. Research is focusing upon comparisons between traditional and game-based learning approaches, integration of artificial life technologies, modeling and visualization work, new uses for games technologies, and testing new multimodal interfaces. The Research & Development Group provides a focus for the research and development community in the UK and abroad through creating new links between research groups and collaborating on leading edge research projects, as well as stimulating opportunities for bringing together researchers from psychology, computer science, education, creative media and other disciplinary backgrounds to fully explore the uses and applications of serious games. The Research Group also supports and develops a network of the research, development and user communities with special interest groups in health training, education, schools, environmental training and awareness and team-based training. The Research & Development Group disseminates its findings to the West Midlands community through seminars, targeted publications and reports. SGI papers have been accepted at top conferences such as IEEE, ACM, SIGGRAPH, and at top journals with high impact (see Publication Section). Our research strengths have enabled us to receive over £2.5 million between August 2007 and October 2009. SGI is involved in a variety of projects that are focused into the different application areas of serious games and virtual worlds.

Participation in relevant projects. EC: HERMES; CHILL, ALICE; SIMAULA.

Role in MASELTOV: Development of persuasive elements in mobile assistance (WP7), development of serious games for motivated informal learning of immigrants' activities towards social inclusion (WP7).

Attendees at the workshop: Ian Dunwell

4.2.7 CZECH TECHNICAL UNIVERSITY (CTU)

The Centre for Machine Perception is a research and educational unit within the Department of Cybernetics, Faculty of Electrical Engineering, the Czech Technical University (CTU, established in 1707) in Prague. It has approximately 40 staff members and 15 full-time PhD students. Its main research topics are computer vision, pattern recognition, machine learning and robotics.

The Centre is currently involved in four EC funded research projects (DIRAC, MASH, HUMAVIPS, NIFTY) and several national projects. CMP was part of MIRACLE (Machine Intelligence Research and Application Centre for Learning Excellence) within the highly selective EU "Centres of Excellence" framework from 2000 till a 2004. Among the recent scientific awards are the second place in the Vision Contest a(3D location estimation from uncalibrated 2D images) by the International Conference on Computer Vision (ICCV) in 2005, two Best Science Paper Prizes at the British Machine Vision Conference (BMVC) in 2002 and 2005, the Best Paper Honourable Mention at the Computer Vision and Pattern Recognition Conference (CVPR) in 2003, and the Best Paper Prize at the Asian Conference on Computer Vision (ACCV) in 2007.

CMP has had a number of successful long term research collaboration with high-tech companies (e.g., Honeywell, Oxford Metrics, Robert Bosch GmbH, Samsung, Boeing, Texas Instruments, IBM), including long-term ones e.g. with Hitachi (4 years) and Toyota Motor Europe (8 years).

Participation in relevant projects. EC: DIPLECS, DIRAC, HUMAVIPS, MASH.

Role in MASELTOV: Mobile intelligent vision services, namely mobile text location and recognition, location recognition, for the implementation of the mobile text lens (WP4).

Attendees at the workshop: Lukáš Neumann

4.2.8 FH JOANNEUM GMBH, UNIVERSITY OF APPLIED SCIENCES (FHJ)

FH JOANNEUM supports and promotes the expansion of applied R&D for continuous professional improvement of education while maintaining the practical relevance. The highly qualified and experienced staffs of the FH JOANNEUM are substantively involved in numerous research projects and continuously generate knowledge for the university, industry and society. Research questions on the future are operated in a multi-disciplinary process and in cooperation with partners from business, industry and public institutions. Against the backdrop of transnational partner networks and consortia of universities and companies they challenging their expertise the partners, especially small and medium enterprises in the planning and implementation of product and process innovations. The know-how from the research will be incorporated into teaching and serving our University of Applied Sciences as a basis. This is also for our students, who are already involved in early research projects, study career-based and practice-oriented.

The course driven Sections "Health Care Engineering" and "eHealth" research in a joint R&D-center on current topics of the department of health sciences and medicine of tomorrow. The operational focus will lie on the one hand, in the areas of technology for health care, information and communication systems and other areas are the logistics, process, project and quality management, controlling and management in health care other priorities. In addition, the e-health research experts in software development for medical devices and ambient intelligence in the area of Ambient Assisted Living (AAL). In the research focus on "Public health and health systems" will explored problems and issues in the areas of health economics, public health, health care and health promotion as well as health products and services. The connected center of excellence "ZML-Innovative Learning Scenarios" conducts applied research on eLearning in national projects in the fields of virtual simulation, virtual communities, innovative learning materials and research and working with international partners in innovative projects and more to communities of practice, knowledge transfer through online courses.

Participation in relevant projects: EC: AVATAR; National: MARIA, DIAFIT, ÖKOTOPIA

Role in MASELTOV: User requirements & interaction design (WP2), system specification & integration (WP3), mobile assistance & information services (WP7), dissemination and exploitation (WP10).

Attendees at the workshop: Walter Scheitz

4.2.9 TELECOM ITALIA S.P.A. (TI)

The Telecom Italia Group is a major Italian enterprise and a key European strategic ICT player. Driven by technological innovation and a commitment to service excellence, TI companies operate in fixed-line and mobile telecommunications, internet & media, information technologies. Most of the R&D activities of the Group are performed inside the Innovation and R&D Departments of Telecom Italia and involve around 4500 researchers and technicians with an average investment of 650 M€ per year.

Telecom Italia Lab is the department whose remit is the supervision of technological innovation for the Group, scouting for new technologies and engineering operations for services and network platforms. The work carried out by the R&D departments is the outcome of a strategic partnership with the main manufacturers of telecommunications equipment and systems, and with centres of excellence in research at the most highly qualified national and

international academic institutions. On the international level Telecom Italia has pledged a substantial commitment to the task of standardisation and has been involved from the beginning in the European Union Framework Programmes starting with the first pilot projects of the ESPRIT programme in 1983 and continuing as one of the primary European collaborators in terms of both finance and the number of projects. In the Seventh Framework Programme Telecom Italia is at present involved in 24 different Projects.

Main research areas are: the evolution of mobile communication, from third generation mobile systems to a variety of overlapping wireless networks increasing access flexibility; the diffusion of broadband bandwidth, studying affective techno-economic solutions to deploy optical fibers; the dissemination of identification and localization systems embedding tagging technologies within telecommunication functionality. Examples of specific research projects are the following: Wireless Sensor Network Applications, Context Awareness/Ambient Intelligence Platforms & Services, Innovative Services and Applications, Connected Car, 3D Multimedia Technologies, Software Defined Radio, e-Tourism.

Participation in relevant projects: EC: PASION.

Role in MASELTOV: User requirement and interaction design (WP2), system specification and integration (WP3), community building services (WP8), dissemination and exploitation (WP10).

Attendees at the workshop: Giovanni Nassi, Nicoletta Bersia

4.2.10 FLUIDTIME DATA SERVICES GMBH (FLU)

Fluidtime is a design and software company established in August 2004; it is located in Vienna, Austria. The company's specialty lies in the successful combination of attractive design with high quality software specification, development and operation. The client's raw data is functionally processed and moreover presented in a visually appealing way - to be used in-house as well as by your (end) customers. Typically, services can be obtained via all digital communication channels: from the classic internet and mobile web to text messages and applications for mobile phones or In-Car usage, RRS feeds and regional distribution media such as Bluetooth or WLAN. Besides high qualitative software development Fluidtime stands for successful service design in web and mobile areas. In this context, attractive and clear solutions stimulate the intuitive use of the services and offer an aesthetic added value. Fluidtime continuously sets new standards by combining excellent design and software development with far reaching services. The development team brings in sound experiences related to the most common programming languages and environments like C++, .Net, PHP, Ajax, Java, Python and databases, e.g. MS-SQL, MY-SQL, Oracle. Numerous projects in cooperation with universities and research organizations guarantee a high innovation level. Solutions in the application fields Travel and Transport, Customer-Relationship-Management and Digital Marketing, News and Media as well as Business Process are the focus of Fluidtime business activities. Particularly in the area of traffic and transport, Fluidtime provides leading edge services offerings. Fluidtime works with an interdisciplinary team and thus benefits from wide-ranging competences in the areas of interactive design, architecture, IT, mathematics, project management and economics. With our partners and clients we create comprehensive solutions that combine design and functionality of high quality.

Participation in relevant projects: National: qando, AnachB mobile, mobi Kid; Germany: VVS

Role in MASELTOV: Requirements & service scenarios (WP2), application of pedestrian navigation service in Vienna and London (WP6), exploitation (WP10).

Attendees at the workshop: Mirjana Artukovic

4.2.11 BUSUU ONLINE S.L. (BUS)

busuu.com is Europe's largest online community for learning languages with more than 1.3 million users from all over the world. Users have free access to audio-visual online courses for learning Spanish, German, French, Italian, Portuguese, Russian and English.

Users' language skills can also be improved through direct interaction with other native speakers via an integrated video-chat application and peer-to-peer text corrections. Each busuu.com user is therefore a 'tutor' of their own mother tongue as well as a 'student' of a foreign language.

The start-up was founded in Madrid in early 2008. It was a UNESCO partner project during the International Year of Languages in 2008 and received several prestigious awards such as:

- Official partner project of the UNESCO in the International Year of languages (September 2008)
- AlwaysOn Global Winner (July 2009)
- European Language Label of the European Commission (Sept 2009)
- Innovation Award of the CeBIT (March 2010)
- Red Herring Europe Winner (May 2010)
- “Highly commended” within the European TechCrunch Awards in the “Best Learning Start-Up” Category (November 2010)

Role in MASELTOV: Requirements & service scenarios (WP2), development of immigrant specific mobile language learning components (WP7), informal language learning in social networks (WP8), exploitation activities (WP10).

Attendees at the workshop: Oula Akiki

4.2.12 FUNDACIÓN DESARROLLO SOSTENIDO (FUN)

The Foundation for Sustainable Development, Fundeso, is an independent, non-governmental organization (NGO) with no religious or political affiliation founded in 1995. In about fifteen years, and thanks to a great number of private and public donations, Fundeso has provided more than 40 million Euros to projects for integrated development and sustainability in 26 countries in Latin America, Africa, and Asia. At the same time, it has promoted educational and sensitizing projects in Spanish society about matters related to development, which prompted awareness programs specifically for immigrants.

Since 2006 Fundeso manages the African-Hispanic Centre for Integration and Participation (CEPI) of Immigrant People and a lot of projects focused on the integration of immigration people in Spain: professional training, job search, legal and social advice and specific women advice.

MISSION: To promote economic and social development of peoples of Asia, Africa, and Latin America by promoting the participation of local organizations as actors of social change, and to encourage the Spanish society to assume its role in building a more just and inclusive global community.

VISION: To be a leading organization concerning the NGO sector, on the basis of the quality of its interventions and the social impact achieved through the projects implemented with civil society organizations, according to the principles of subsidiarity, responsibility and complementarity.

Role in MASELTOV: Requirements & service scenarios (WP2), evaluation of prototypes (WP9) in Madrid.

Attendees at the workshop: Samuel F. Ricardo Ruiz

4.2.13 VEREIN DANAIDA (DAN)

DANAIDA is an Austrian non-profit organisation for female migrants, founded 1991. The women come from Chechnya, Afghanistan, Bosnia, Croatia, Turkey, Rumania, Egypt, Thailand, Iraq, Iran, Ghana, Nigeria, but also in a smaller number from other African, Asian, American and European countries. Some of them are refugees or have asked for asylum and are waiting for a decision, others came here because of war in their home countries, others were looking for a better economic situation for themselves and their families and others are married with an Austrian man. The reasons why the women came to Austria are different, but some of their problems are the same: isolation; little or no knowledge of the German language, the bureaucracy with work-permits, residency papers, nationality, etc.; finding a job.

DANAIDA offers German language training for female migrants including information that answers questions concerning the everyday life of the women. Since 1995 we also offer literacy training for women, who did not have the chance to learn how to read or to write in their home countries or had learned another alphabet (for example: Arabic or Thai...). Accompanied to the courses, we offer free child care, because many of the women could not join our courses, if we didn't have a baby-sitting service. On the other hand we offer a meeting point for women. One of our activities is to organise cooking groups where Austrian and foreign women can meet and get in contact while they are cooking and eating international food.

Since 1997 Danaida is participating in European networking projects, it started with "Amigra" where we could expand our offers for those women who were allowed to work in Austria, but didn't find jobs here. Parts of the project were German language training and guidance for the women who attended the program on the other hand we tried to elaborate new job possibilities for migrant women or to checkup which further education the women would need to have better chances on the Austrian labor market. In the following years Danaida was part of the European Networking Projects: "Moli", "Inpower" and "Bildung schlägt Funken". Actually Danaida is part of the two National Networks "MIKA" and "Ways2go - MARIA". Since 2000 we are also offering preschool groups for children with other mother tongues than German. The aims of these learning-groups are to give children the possibility to learn the German language and to prepare for school.

Role in MASELTOV: Requirements & service scenarios (WP2), evaluation of prototypes (WP9) in Vienna.

Attendees at the workshop: n.a.

4.2.14 MIGRANTS RESOURCE CENTRE (MRC)

MRC was founded in 1984. It is a company limited by guarantee (registration number 1911662) and a registered charity (number 291789). MRC works with migrants and refugees and in partnership with other agencies to effect social justice and change, enabling migrants and refugees to fully participate in this society. In furtherance of its objectives, MRC carries out the following activities for the public benefit of its users:

- Advice services, including a generalist casework service in housing, welfare and debt and a specialist immigration advice service
- Community based training and educational opportunities (including ESOL) and new courses in response to identified and prioritised need
- Online Centre providing specific training courses and drop-in sessions
- Creche support for users of the Centre
- Health access advice and support for migrants and refugees

- Information, Advice and Guidance on Employment & Training
- Media & Policy work to influence policymakers and training on media & policy work to users.

MRC has 11 fulltime paid staff (19 including part-timers) and approximately 40 volunteers who assist with aspects of service delivery and administration and, wherever possible, MRC helps them to retrain or gain qualifications. MRC is governed by 9 trustees from diverse backgrounds and skill base.

The Migrants Resource Centre Online Centre provides ICT training to users of the Centre, from basic digital literacy, up to Microsoft qualifications. The Online Centre is a registered UK Online Centre partner and a Microsoft IT Academy. The Online Centre staff specialise in teaching ICT skills to people for whom English is not their first language, and in assisting users to access resources and information which will further their aims and objectives in making a life in the UK.

Partnerships in Europe - MRC currently works in partnership across Europe as follows:

European Programme for Integration and Migration (NEF) Migrants and Media Project

Leonardo Da Vinci: Intralog (Europass Plus, Vola Project)

UK Associate Partner European ICT Policy Support Programme (Bridge IT)

Formerly partner in Trainability, Leonardo da Vinci programme

Role in MASELTOV: Requirements & service scenarios (WP2), evaluation of prototypes (WP9) in London.

Attendees at the workshop: Sara Wickert

4.3 TARDIS

4.3.1 UNIVERSITÉ PIERRE ET MARIE CURIE – PARIS 6 (UPMC)

UPMC, the largest scientific University in France has 4 500 researchers and teachers, 180 laboratories, 30 000 students and 700 scientific PhD delivered per year. UPMC is involved in numerous international partnership agreements and has France's largest scientific library and infrastructures. UPMC European Affairs office, in charge of the EU projects, has managed so far 90 FP7 projects.

The Laboratoire d'Informatique de Paris 6 (LIP6) which is dedicated to computer science is internationally recognised as a leading research institute. As joint research unit, it regroups 150 researchers from the UPMC, the Centre National pour la Recherche Scientifique (CNRS), the Institut National pour la Recherche en Informatique et en Automatique (INRIA) and other universities. It has a very broad spectrum of research activities from networks, distributed systems, databases and languages to simulation, numerical computation aid to decision and symbolic reasoning. In the Decision, Intelligent Systems and operational Research department (DESIR), we focus on Artificial Intelligence research and we have been working for several years on affective computing.

Role in TARDIS: UPMC has worked on emotions in games and simulation at the national level on the project “Dialogue with Experience, Emotions and Personality” (DEEP) and on the FUI8 project “Terra Dynamica”. In the DEEP project, they have developed a socio-emotional model and we implemented it in an open-source platform as a scene conception toolkit for game designers (OSSE). This model takes into account social relations together with emotions and personality to outline realistic dialogues in the game (e.g. levels of politeness). Their models in both projects rely on a knowledge representation model and ontologies and implement social-science models for emotions, personality and social

relations. In the TARDIS project, UPMC will be in charge of WP3 for the definition of the computational model of social relations (WP3 - integration of models by UPMC (OSSE) and DFKI (Alma)), reasoning model for actions selection based on the scenario (WP3) and semantic-based social behaviour configuration by practitioners for scenario definition (WP1). As the project coordinator, UPMC will also be in charge of WP0 - Management - and will participate actively in WP5 - Integration - as a research counsellor and will be leading WP7 - Dissemination - for the project's promotion in the scientific community. UPMC will be in charge of all clustering activities in the project.

Attendees at the workshop: Nicolas Sabouret, Ahlem Abbaci, Hazaël Jones

4.3.2 DEUTSCHES FORSCHUNGSZENTRUM FÜR KÜNSTLICHE INTELLIGENZ GMBH (DFKI)

Founded in 1988, DFKI today is one of the largest non-profit contract research institutes in the field of innovative software technology based on Artificial Intelligence methods. DFKI is focusing on the complete cycle of innovation - from world-class basic research and technology development through leading-edge demonstrators and prototypes to product functions and commercialization. Based in Berlin, Bremen, Kaiserslautern, and Saarbrücken, the German Research Centre for Artificial Intelligence ranks among the important "Centers of Excellence" worldwide. An important element of DFKI's mission is to move innovations as quickly as possible from the lab into the marketplace. By maintaining research projects at the forefront of science DFKI is able to meet its technology transfer goals. DFKI has also successfully conducted a number of projects for the European commission under the programs PROFIT, ESPRIT, IST, TELEMATICS, and Networks of Excellence. Furthermore, it has played major role in the VERBMOBIL project, which is considered to be one of the largest projects on machine translation worldwide.

Role in TARDIS: In TARDIS, DFKI's Intelligent User Interfaces (IUI) department will be involved. Research in this department focuses on intelligent information assistants, multimedia authoring tools, multimodal interfaces, telecooperation systems, natural-language systems and virtual characters. The department has a great deal of experience in the coordination of and participation in various past EU research projects, such as SAFIRA, HUMAINE, and IDEAS4GAMES. Today, the group is considered to be one of the leading research teams in the area of emotion modeling and animated virtual characters.

Attendees at the workshop: Alexis Heloir

4.3.3 INSTITUTE OF EDUCATION (IOE)

Institute of Education (IOE) is one of the world's leading centres for education and social sciences. The London Knowledge Lab (LKL) is a department in the Faculty of Children and Learning, Institute of Education, University of London. The LKL is a unique collaboration between the Institute of Education and Birkbeck. LKL brings together computer and social scientists from a very broad range of fields, allowing interdisciplinary research on understanding the place of digital technologies and media in cultural, social and educational relationships with knowledge; designing, building and evaluating systems, processes and interfaces that enhance these relationships; and examining the assumptions about knowledge and learning that underlie the wide range of applications of digital technologies.

The ways in which we learn, and what we need to know, are changing. LKL's research aims are to explore and invent the roles of technology in this process, and to understand how technology relates to broader social, economic and cultural factors.

Role in TARDIS: Dr Porayska-Pomsta is a member of the consortium responsible for the evaluation workpackage (WP6) and TARDIS user modeling (part of WP2). She is a Principal

Investigator (PI) on the ECHOES II project that develops a technology-enhanced learning environment for supporting social interaction and communication skills in typically developing children and children on the Autism Spectrum. She brings her experience of managing an interdisciplinary research team in the context of innovative technology design for social inclusion. Her relevant research experience lies in the areas of real-time user modeling, human-computer interfaces, participatory design and evaluation of technology for social intervention.

Attendees at the workshop: Kaška Porayska-Pomsta, Sara Bernardini

4.3.4 INSTITUT TÉLÉCOM (IT)

The Institut Télécom is made up of “Grandes Ecoles” (prestigious French higher education establishments) in the field of information and communication technology (ICT): Telecom ParisTech, Telecom Bretagne, Telecom SudParis, Telecom Business School, along with two establishments created in partnership with universities and businesses: Telecom Lille 1 and EURECOM, and since 2008, two associate schools : Telecom Saint-Etienne and ENSPS.

The Institut Télécom’s mission is to provide training programs and to conduct research in ICT. Institut Télécom’s mission is also to contribute to the industrial development of ICT through the utilization of science and technology and development research carried out in close collaboration with industry. The Institut Télécom features around 600 teaching and research staff and a number of 5000 students.

Its research teams cover a broad spectrum of disciplines, ranging from fundamental technologies, information processing, networks, computing and software to the economic, social, and legal aspects, industrial strategies and new services and usages. This expertise allows research programs to be conducted in the fields of mobile, satellite and optical communications, access networks, multimedia, business communications and the Internet.

Telecom ParisTech (former Ecole Nationale Supérieure des Télécommunications) is one of France's leading graduate engineering schools and is considered the best school in the field of ICT. The school is classed among the Grandes Ecoles d'Ingénieurs. It hosts a student body of more than 1200 students (including 750 in the three year diploma program, 100 in one of the master's level programs, and 300 Ph.D. students). The Laboratoire de Traitement et Communication de l'Information (**LTCI**) is a Joint Research Unit (JRU) between CNRS and Institut Télécom – Télécom ParisTech, UMR 5141. It hosts all the research efforts of Télécom ParisTech (a faculty of about 150 full-time staff (full professors, associate and assistant professors), 30 full time researchers from CNRS and 300 PhD students).

Role in TARDIS: Telecom’s role is mainly related to the model of emotion and social attitude expression. In particular it will work on a model of social cues, emotional and nonverbal communicative behavior in ECA. It will bring its expertise on ECA system.

Attendees at the workshop: Mathieu Chollet

4.3.5 MISSION LOCALE VAL D'OISE EST (MLVOE)

The structure is a private and autonomous legal entity, included in a network of similar structures covering the whole French territory. The MLVOE is commissioned by the government to welcome, inform, orient, to cater for and to give this people between 15 and 24 years old some career advice, who does not go to school anymore, in order to achieve the social and professional insertion.

Its main resources come from the State, the Région Ile-de-France, the local authorities: Communauté d'Agglomération de Val-de-France, Communauté de Communes de Roissy-

Porte-de-France, Commune de Goussainville, Commune de Gonesse (town's local communities closed to the MLVOE).

Some actions of MLVOE are financed indirectly by the European Social Fund, through the Department of Val d'Oise. The MLVOE has 8000 visits per year. Each young people has a referent counsellor and can be accompanied for a long period (several years). The work combines individual interviews and workshops. In total, the intervention covers 40 towns and 260 000 people in the north suburban area of Paris.

The Mission Locale mobilizes for young people under his responsibility institutions of education, employment agency, institutions of social sector, following their abilities. The structure is in contact with firms in order to enhanced job accessibility for young people and it is particularly involved in the fight against discrimination.

Role in TARDIS: The Mission Locale will raise a group of experts and practitioner who will be in charge of the registering and consideration of the required skills and also in charge of the defining scenarios (WP1). Then, and within the frame of regular job search workshops, the Mission Locale will test and evaluate the results (WP6). The Mission Locale shall actively promote this tool in partnership with the Conseil National des Missions Locales (WP7 Dissemination)

Attendees at the workshop: Fred Ritter

4.3.6 UNIVERSITÄT AUGSBURG (UAU)

The University of Augsburg is one of the new, modern universities in Bavaria. Computer Science at Augsburg University stands for the combination of core informatics with applied subjects: media informatics, economical informatics, geo informatics and environmental informatics under one roof. This broad network is a unique feature in Bavaria and in Germany. Furthermore, the department distinguishes itself from most other universities by offering a BC and MS in Computer Science & Multimedia. Within the Bavaria Network of Excellence (ENB), the Computer Science Department is conducting as a lead manager the Elite Study Program Software Engineering in cooperation with TU Munich and LMU Munich. The Laboratory for Human-Centered Multimedia was founded in 2001 as part of the department of Computer Science at Augsburg University. The team members have a long-term experience in the design, implementation and evaluation of multimodal user interfaces and intelligent interactive systems and conducted projects for the EU, BMBF, GIF and industries in this area. Ongoing and completed networks and projects that are of relevance to the TARDIS proposal include the EU NoEs Humaine and IRIS, the EU IPs CALLAS and CEEDS, the EU STREPs E-Circus and eCUTE and the DFG-funded project CUBE-G.

Role in TARDIS: The lab's task within TARDIS will be to provide the technology for analyzing the user's emotional and attentive state based on Smart Sensor Integration (SSI), a general framework for the integration of a single or multiple sensors into multimedia applications.

Attendees at the workshop: Elisabeth André, Felix Kistler, Damian Ionut

4.3.7 UNIVERSITEIT UTRECHT (UU)

Utrecht University has a long tradition of research in game technology and applications. It employs internationally renowned researchers that have published numerous papers in the field, are member (or chair) of program committees of many of the conferences in the field and give invited talks all over the world. Utrecht has been performing research in this area for

two decades. In particular path planning and animation have been important topics. Researchers in Utrecht have developed the Probabilistic Roadmap Planner, the most used path planning technique in the world. We have done also important on animation and emotion, such as the step-based animation system or real-time simulation of crying motions. Utrecht has a lot of experience working with industry and other research institutions on the topic of interactive 3D environments. For example, we work together with the Dutch company Motek Medical on animation for medical purposes. We also organize the yearly conference on Motion in Games (MIG) that brings together the world's top researchers in this domain.

Role in TARDIS: Utrecht is considered the centre of game technology research in the Netherlands. The department initiated and leads the large Dutch project GATE (Game Research for Training and Entertainment). In the GATE project Utrecht works together with researcher from psychology, information science, educational sciences and art. This cross-fertilization leads to important new ideas and technology that will form the basis of the serious games of the future. Furthermore, Utrecht is a partner of the GaLA Network of Excellence, a European network of research institutions and companies working on serious games. Our experience and network will ensure the success and the impact of the TARDIS project in Europe.

In the TARDIS project Utrecht University will contribute its expertise in animation and controlling characters in real-time in complex environments, as a part of WP4. We will also contribute to the integration of the different technologies (WP5), using our wide experience in earlier projects such as GATE. The TARDIS project will allow us to further our research in the direction of emotional animation, which poses a set of very challenging research questions.

Attendees at the workshop: Cathy Ennis

4.3.8 WIZARBOX

Wizarbox is a video game development studio created in 2003 employing around 30 collaborators and based in France close to Paris. The studio develops different video games for international distributors such as Ubisoft or Atari (For example Scrabble 2007 and 2009 on PC, Wii, Nintendo DS and Venetia on Xbox 360 and PS3).

The company offers its skills to develop serious games, simulators, smartphone and touchpad applications and also technological software. The solutions provided are used in various fields such as Education, Health, Defense, Management, Industries, Public Administration, Research and Development and Entertainment. The development team is strongly skilled in graphics (2D, 3D, cartoon or realistic design), programming (on PC, smartphones, touchpad, consoles) and pedagogical engineering and ergonomics (learning curve, visual feed-back). The partners and customers working with Wizarbox are from multinational companies such as Thales to SMBs. (Please check the company website in order to get more information: industry.wizarbox.com/fr)

Role in TARDIS: In TARDIS, Wizarbox will be in charge of developing the application (composed of game design and scenario conception, graphics tasks, user's interfaces, programming and progression tracking) and will play a key role in project's exploitation and dissemination.

The company Wizarbox has already won public tenders and performed such tasks within collaborative projects:

- **3 projects selected at the Serious Games public tender from the French government** in 2009 (Bus Training game aiming at delivering a tool in order to virtually train the Bus Drivers for the French Public Transport Authority, Star Teacher

aiming at developing a virtual platform to learn oral English thanks to karaoke technology, and Jeu Serai

- **1 project selected at the Innovative Cultural Services public tender from the French government** in 2009. Wizardbox developed an iPhone application for a French Museum allowing the visitors to customize their visit according to different parameters such as the time they have or their point of interest.

Attendees at the workshop: Caroline Sapt

5. DGEI CLUSTERING (IPTS, IBBT)

The Institute for Perspective Technological Studies (IPTS) is one of the seven scientific institutes of the European Commission's Joint Research Centre (JRC). IPTS promotes and enables a better understanding of the links between technology, economy and society. IPTS aim to provide customer-driven support to the EU policy-making process by developing science-based responses to policy challenges that have both a socio-economic as well as a scientific and technological dimension.

IPTS is working on the state-of-the-art of Digital Games for Empowerment and Inclusion (DGEI) aiming to make a roadmap for the upcoming years.

Actually the report on the state-of-the-art has been commissioned to IBBT (Interdisciplinary Institute for Broadband Technology) that is an independent research institute founded by the Flemish government to stimulate ICT innovation. The IBBT team offers companies and organizations active support in research and development.

Digital games producing industries are expected to grow fast in the future and the opportunities offered by Digital Games for Empowerment and Inclusion comprise:

- **Commercial Off the Shelf Games (COTS)** made for the main stream leisure market can be exploited in many ways in non-leisure contexts, that include empowerment and social inclusion. Their strengths are familiarity to users, high production values, advanced technology, and wide variety – strategy, puzzles, role, playing, action, sports, high involvement and 'casual' games, online and on mobiles.
- **Special made games and simulations:** sometimes referred to as 'serious games', these build on the advanced technology, and interactive familiarity of leisure games, and present a growing market across many sectors. Major companies are buying training simulations, health care agencies are commissioning a whole range of games; and are they established part of military training.
- **Participation and Learning through Game Marketing:** the technologies and techniques of game design offer a powerful tool to empower people both in learning skills, teamwork, and communicating with external audiences, through the creation of new products.

The rise of new mass market gaming on mobiles and online, with interfaces based on gesture and movement, incorporating sophisticated levels of Artificial intelligence, is rapidly expanding the possibilities and reach of digital games. Digital games are becoming integrated with other online media and blended with real-life activities, including the development of gamification for behaviour change, and location-based mobile gaming. Digital games, perhaps the most 'social' of all media forms, are leading new practices of cooperation online, and

emerging business models such as in-game payment and premium services are increasing the potential to develop new markets

Furthermore, IPTS is building a database of games and solutions for empowerment and inclusion that already exist, such as games in formal education and in health wellness and aging, adult education and employability, migrant integration, supporting professionals and civic engagement.

6. WORK GROUPS

Two work group sessions were held during the workshop. This chapter defines the clustering activities that have been discussed and the work task group formation.

6.1 CLUSTERING ACTIVITIES

In the first group work session the clustering topics that have been assigned were:

1. Common dissemination channels
2. Common exploitation
3. Common success indicators
4. Exchange of lessons learned
5. Exchange of user requirements
6. Exchange of validation methodologies

In the second group work session the clustering topics that have been assigned were:

1. Sharing of engineering requirements
2. Sharing of methodologies
3. Sharing of technical solutions
4. Comparison of approaches (for complementarities and/or comparison)
5. Organizing next DGEI clustering workshops (internal in M18 in Brussels, international in M30 - M33, etc.)
6. Further clustering potential (e.g., GALA network)

6.2 FORMATION OF GROUPS, TASK GROUP DEFINITION AND RAPPORTEURS

This section defines the work groups' formation; Table 6 and Table 7 show the task groups for each clustering activity including the rapporteurs' name.

| | |
|---|--|
| Group 1 Common dissemination channels Lucas Paletta (rapporteur) Nicoletta Bersia Helen O'Reilly Nikki Sullings Fred Ritter Ahlem Abbaci Lazaros Polymenakos | Group 2 Common exploitation Nicolas Sabouret (rapporteur) Shai Newman Felix Kistler Caroline Sapt James Stewart |
| Group 3 Common success indicators Daniel Lundqvist (rapporteur) Peter Robinson Paolo Coletta Agnes Kukulska-Hulme Hazaël Jones Walter Scheitz Ian Dunwell | Group 4 Exchange of lessons learned Kaška Porayska-Pomsta (rapporteur) Aurélie Baranger Sara Bernardini Oula Akiki Alexis Heloir Mirjana Artukovic |
| Group 5 Exchange of user requirements Shahar Tal (rapporteur) Giovanni Nassi Damian Ionut Samuel F. Ricardo Ruiz Stefano Piana Jan Bobeth Ian Davies | Group 6 Next DGEI clustering workshop Björn Schuller (rapporteur) Cathy Ennis Mathieu Chollet Sara Wickert |

Table 6: *Work groups in the first session*

| | |
|--|--|
| Group 7 Exchange of validation methodologies Jan Bobeth (rapporteur) Paolo Coletta Kaška Porayska-Pomsta Helen O'Reilly Daniel Lundqvist | Group 8 Exchange of engineering requirements Björn Schuller (rapporteur) Ian Davies Elisabeth André Nicoletta Bersia Erik Marchi |
| Group 9 Exchange of technical solutions Lazaros Polymenakos (rapporteur) Felix Kistler Damian Ionut Mirjana Artukovic Giovanni Nassi Stefano Piana Peter Robinson | Group 10 Exchange of methodologies Nicolas Sabouret (rapporteur) Sara Bernardini Oula Akiki Sara Wickert Mathieu Chollet Hazaël Jones Lukáš Neumann |
| Group 11 Comparison of approaches Shai Newman (rapporteur) Agnes Kukulska-Hulme James Stewart Shahar Tal | Group 12 Further clustering potential Lucas Paletta (rapporteur) Nikki Sullings Ahlem Abbaci Ian Dunwell Walter Scheitz Aurélie Baranger |

Table 7: *Work groups in the second session*

7. CLUSTERING ACTIVITIES

In the final session of the workshop, all the clustering ideas have been presented by each rapporteur. This chapter comprises the outcome of the work groups' sessions. For each activity a work plan by the end of this year is given.

7.1 COMMON DISSEMINATION CHANNELS

This section presents a list of potential common dissemination channels such as electronic media, scientific journals, press and folders that can be used to approach a common dissemination.

7.1.1 ELECTRONIC MEDIA

For each project's **website** it has been proposed to:

- Link and refer to the other projects' websites
- Create a specific page on the DGEI clustering

- Include in the homepage Facebook and Twitter channels

Furthermore, alternative channels have been envisioned:

- **DGEI LinkedIn** to which contribute regularly
- **Twitter channel** for DGEI specific channel
- **DGEI Facebook** as a visually interesting dissemination channel
- Electronic **newsletters** to refer to other projects

Moreover, TARDIS already planned to have an entry at homepage for **broad public** for feedback and it can be used also to make users aware about the other projects.

Last, **videos** that are available on the homepage and/or collected at dedicated YouTube site might mention DGEI at the end.

7.1.2 STRATEGIES

The general **temporal** aspects of dissemination firstly focus on scientific dissemination and on public **administration** involvement:

- Local authorities (special login in TARDIS to collect data)
- European parliament visit (DGEI & specific interests)

7.1.3 SCIENTIFIC PRODUCTION

It has been proposed to use common scientific dissemination channels such as:

- **Joint journal** publications
- **Conferences** jointly organised :
 - E.g. Game conference organised by AIT (2 day workshop, session regarding)
 - Specific workshops (e.g. attention)
 - Local events – make a topic: “fete de la science”

Concerning events, workshops and conferences it has been suggested to inform other 3 or 2 weeks before.

7.1.4 PRESS AND FOLDERS

Other means of common dissemination are press and folders:

- Technology media (magazines)
- Weekly magazine article
- Flyers:
 - Written contribution: mentioning all projects
 - Distribute flyers of other projects at other events
 - Own DGEI flyer (DGEI Tryptichon)
 - Create the DGEI logo

7.1.5 WORK PLAN

The existing projects' websites will link and refer each other. A specific page on DGEI clustering will be created in each of the websites (June 2012). The websites' homepage will include Facebook and Twitter channels (July 2012). Alternative channels will be explored and electronic newsletters will include a reference to other projects (continuous). TARDIS will make users aware about the other projects through the broad public entry. Videos available on the homepage will mention the DGEI at the end (September 2012).

Common scientific dissemination channels will be explored with the aim to produce joint journal publication and jointly organised conferences (dissemination plan October 2012). The DGEI logo will be created (August 2012).

Furthermore, dissemination channels such as technology media and weekly magazines will be explored (dissemination plan October 2012)..

This section comprises potential activities that can enable a common exploitation strategy.

7.2.1 TARDIS AND ASC – COMMON COMMERCIAL TARGET GROUPS

ASC-Inclusion and TARDIS are creating products that can be sold to common buyers:

- Healthcare
- Inclusion associations
- Government and NGO

Furthermore, relations with schools can be built, taking care of what they need and what they already buy.

Parents can be reached through the online marketing. Last, it can be thought about a sponsorship to be used as potential common exploitation.

7.2.2 ASC: ONLINE SURVEY, TESTING

Online survey and testing should include not only users but also policy makers and budget sources.

In order to improve exploitation, it can be appropriate to find high-level, famous, senior person from ministry and psychologists that can assert that Digital Games can bring much to empowerment and inclusion.

7.2.3 COMMON USERS

In MASELTOV and TARDIS there are potential common users such as young adults (TARDIS) that are also migrants (MASELTOV).

7.2.4 AFFECTIVE COMPUTING TECHNOLOGY (ASC AND TARDIS)

The affective computing technology that has been tested with real young people with inclusion difficulties can be sold to the game industry and to online conversational agents companies.

7.2.5 WORK PLAN

Representatives of the projects will work together to finalise exploitation strategies to be used in the cluster (exploitation plan October 2012).. The proposed activities such as online survey and testing, common commercial target groups, common users and affective computing technology will be further explored and analysed (respective exploitation plan reports, month 12, 24, 36).

This section consists of a list of potential common success indicators such as: social, academic, commercial and technological indicators.

Social success indicators

- Policy uptake
- Media interest
- Knowledge among users and relatives

- Credibility among users and relatives
- Beneficial effects from using the tool: specific for each project

Social indicators on the user's side

- Improving skills
- Generalization effects
- Better inclusion or integration
- Enjoyment and liking
- User experience: entertaining and educating
- Success or failure if stop using the product

Academic success indicators

- Number of publications
- Rewards and prizes

Commercial success indicators

- Number of sold items
- Revenue
- Market share
- Self-sustainability
- Investors

Technological success indicators

- Innovation: showing to lead the development
- Surprises: technology innovation

Follow Up success indicator

- More future joint projects from collaborating partners

Success indicators ranking

The members of this work group ranked the proposed success indicators and the outcome is that social success indicators seem to be the most important followed by academic and commercial success indicators.

7.3.1 WORK PLAN

The three projects will finalise the investigation on success indicators belonging to each of the proposed categories. Social, academic, commercial and technological indicators will be explored by the representatives of the three projects in order to find the most relevant ones (November 2012).

7.4 EXCHANGE OF LESSONS LEARNED

It has been discussed what the main lessons learned are that can be exchanged within the DGEI cluster. First a list of some possible concerns is given:

- Lack of understanding of the users:
 - Who is the user and what are their needs?
 - How do we go from particular cases to generalising?
- Lack of understanding of practice
 - How to adapt the support to individual needs?

- How to reconcile the interdisciplinary theoretical and practical perspectives?
- How to reconcile the different types of tools that are customised to the specific needs of the individuals?

7.4.1 LESSONS

The potential lessons learned that are useful and can be shared in the cluster are:

1. Involve the users right from the start and throughout the project duration.
2. Try not to make assumptions a priori about the users or the way that they will use your technology.
3. Build the prototype fast and dirty and test the technologies and features even if they are not perfectly implemented.
4. Tailor your knowledge elicitation and testing to age and mental capabilities of the users.

7.4.2 WORK PLAN

Representatives of the three projects will take into account the proposed lessons and continue to exchange them during the project. Representatives of all three projects will involve the users right from the start and throughout the project duration and build the prototype fast and dirty and test the technologies and features even if they are not perfectly implemented (month 12, 24, 36).

7.5 EXCHANGE OF USER REQUIREMENTS

In order to exchange the users' requirements, this section describes the target populations, common challenges and methodologies of the three projects.

Target populations

- TARDIS: Unemployed youngsters (18-25) from low social status
- MASELTOV: (Im)migrants
- ASC-INCLUSION: 5- 10 year old children with high-functioning autism

Common challenges

- Engagement and motivation (ASC- Inclusion, TARDIS)
- Trust (TARDIS, MASELTOV)
- Privacy (TARDIS, ASC- Inclusion)
- Generalization (ASC- Inclusion, TARDIS, MASELTOV)

Exchange of methodology

- Forming focus groups of the target population (interviews, observations)
- Forming specialists' focus groups
- Performing surveys (Internet)
- Cyclic process, refining the users' requirement definition.
- Refer the difficulties that are arising in this initial project's stage, as a representative of problems that need to be dealt with in the final product.

7.5.1 WORK PLAN

The three projects will exchange user requirements and methodologies. Representatives of the projects will share information on the methodologies adopted to form the focus groups of the target population and the specialists' focus groups, including methodologies used to perform surveys.

Representatives of all the three projects will share and refer the difficulties that are arising in this initial project's stage.

7.6 EXCHANGE OF VALIDATION METHODOLOGIES

A summary of validation methodologies adopted by each project is described in this section, concluding with a list of potential validation methodologies that can be exchanged.

7.6.1 ASC-INCLUSION

1. Phase: This phase includes the conceptual development of the VR world and games content. This has to be validated in close cooperation with the focus groups and psychologists and clinicians that experts in these matters.

2. Phase: The actual product (the game) will be evaluated in clinical evaluations to determine the actual effect on ASC children and its usefulness as a training tool. Thereby interviews between the clinician and the parent(s)/carers with the child before and after the use of the product seem to be a feasible way of evaluating the effect of the product on the child. Further, the usage statistics of the game, i.e. the amount of progress made and the time spent in the game, as well as the development of expression parameters over time can be statistically evaluated and correlated to the clinical evaluations. This will help to evaluate the overall goal of training the children's social communication skills.

3. Phase: With the results from the second phase, a fine tuning of the system can be done to improve the acceptance and effectiveness. Then, again the tool will be used by the subjects in the focus group and a measurement shall be performed to determine the effectiveness of the training. Three months after the child has successfully used the game (and has not used the game within this three month time) a second test can be done to determine if the observed training effect still prevails or wears off over time, and a constant training is required to maintain the skills.

7.6.2 TARDIS

1. Phase (iterative way)

- Listen to practitioners and research guidelines and existing knowledge
- Participatory design workshops (youngsters and teachers)
- Aspects to look at:
 - Discuss features of the systems
 - Storyboarding
 - Better understanding what features to focus on and which to skip
 - Discuss UI features --> agent needs to be designed carefully
 - What information is useful to display

2. Phase

- Formative evaluation --> mock-ups, low-fi, high-fi
- Design --> testing (iterative way)

3. Phase

- Final evaluation in the field
- Checking for social communication
- Which features?

7.6.3 MASELTOV

1. Phase

- Interviews
- Focus groups
- Participatory Design Workshops

2. Phase

- Formative analysis by iterative test various types of prototypes (mock-ups, Low-fi, High.fi)
- First field tests of various services

3. Phase

- Final Evaluation in the field at three sites (Madrid, London, Vienna)

7.6.4 POTENTIAL EXCHANGE

All three projects share a similar approach, in that a system/product shall be developed to help automatically assist and train people in diverse kinds of interactions. The individual needs are different, due to different training tasks and different user groups. The same is true for research results, for expression analysis and generation, for example. These results are very specific to and tailored towards the focus groups of each project.

However, the methodologies used for evaluation, analysis, and generation of acoustic, facial, and body gesture expressions can be shared among the projects. Moreover, aspects of system design and integration can be shared, for example. In general, as many specific problems or similar problems might appear in some or all projects, the solutions to these problems could be discussed in union and shared among the projects. Thus, difficulties and problems encountered in each project should be shared and discussed early on, to identify common problems and avoid working on the same solution by two independent partners.

Similar user groups exist for the TARDIS and MASELTOV project, which allows for further clustering. The topic of social communication is common to TARDIS and ASC-inclusion, which might allow for sharing common strategies of dialogue management, and high level structure.

7.6.5 WORK PLAN

Representatives of all the three projects will share aspects of system design and integration. As many specific problems or similar problems might appear in some or all projects the solutions to these problems will be discussed in union and shared among the projects.

7.7 SHARING OF ENGINEERING REQUIREMENTS

This section comprises a list of engineering requirements common to all three projects:

- The platforms need to run on standard computer or smartphone hardware with a strict limit of resources.
- Stored personal data is highly sensitive data, and thus the security of this data is a high priority in all cases.
- Standards for implementations and a common agreement on coding standards.
- Cross-country, multi-lingual, and multi-cultural issues.
- Inter component/module communication protocols (use of middlewares, etc.?).
- User independent functionality “out of the box” (no training with the user is needed).
- Data collection (multimodal, multiple desires) and annotation; sharing of data.
- Platform-independence.
- Code sustainability.
- Mixed open/closed source code; commercial exploitation; licensing.
- Presenting output in playful and engaging way.
- Technical failure and ethical implications.

- Competing with presentation of entertainment productions (e.g., rendered avatars, depth of story/dialogs, realism, etc.).
- Fostering generalisation abilities and system robustness.

7.7.1 WORK PLAN

Representatives all the three projects will share the platforms' needs (standard computer or Smartphone and hardware with a strict limit of resources), data collection (multimodal, multiple desires) including annotation and data, and technical failure and ethical implications.

7.8 SHARING OF METHODOLOGIES

This section analyses the methodologies of the three projects from different perspectives such as: user-centred design, integration, technological constraints, and personal online user data.

7.8.1 USER-CENTRED DESIGN

A user-centered design tries to involve the user in the interaction with the product as far as possible. Thereby the main general issues are how to best understand the user and to make the user participate and elicit knowledge. All projects will face the issue that they need to find out to what extent users are willing to participate and how much feedback can be expected from the user.

It would be possible to share high level methodologies but the execution (low-level) of these methodologies is different because of the various target populations.

7.8.2 INTEGRATION METHODOLOGIES

In TARDIS different libraries are integrated in an open-source platform whereas MASELTOV comprises a core (website) with satellites apps (plug-ins). ASC-Inclusion will follow a similar integration approach than TARDIS for the initial prototype systems, and a have core commercial product at the end.

7.8.3 TECHNOLOGICAL CONSTRAINTS

The display of the avatar is mandatory in TARDIS (standalone app) and optional in MASELTOV. For ASC-Inclusion the type of avatar (if any) or visual feedback and UI have to still be specified.

All projects gather information from various sensors, so there are common sources of information that can be identified and constraints on some types of sensory information that cannot (yet) be identified. In ASC-Inclusion and TARDIS, emotion detection and vocal, facial, and posture analysis will be the core part – although for different focus groups – using standard computer/USB microphones and cameras (possibly Kinect). In MASELTOV a smartphone and its sensors (GPS, phone camera, microphone) will be used as primary input.

7.8.4 PERSONAL/ONLINE USER DATA

The security user data issue include for the three projects:

- TARDIS: game server for logins, passwords and keys, plus a local server in inclusion associations.
- ASC-Inclusion: one secured server, with anonymous user profiles and game status.
- MASELTOV: social networking. Problem: taking care that users might feel “betrayed” if identified as migrants.

All three projects will contain personal user data on servers. While this data should not be directly linkable to a person's name and address, it is still sensitive data, possibly revealing intimate information about the user. In all three projects extra care must be taken to secure the

servers and additionally secure and anonymize the users' data. Efforts can be joined to base the servers on a common platform and jointly make this platform as secure as possible.

7.8.5 WORK PLAN

Representatives of the three projects will share high level methodologies concerning the user-centred design. They will exchange technological constrains of the common sources of information (sensors etc.) and the integration methodologies used for the initial prototypes, and the methodologies used to secure persona user data.

7.9 SHARING OF TECHNICAL SOLUTIONS

This section envisions the technical solutions of the projects and their potential of sharing among projects.

The cluster comprises different types of solutions to be shared and exchanged according to:

- What problem it is solving
- Approach of each solution
- Architectural details
- API information
- Client vs. server components
- Comparison of components with similar function or intent
- Identify interchangeable information for each component used

Various technologies can also be shared based on their role in the developed system:

For the category System Exchange, the following aspects affect more or less all three projects:

- Integration of components
- Re-use of components and platforms
- Modularity
- Performance measure
- Standards implemented and followed
- Devices supported
- Server platform
- Choice of middleware

Technologies for the interpretation of inputs and analysis and generation of the current context include, extraction of relevant features and how they are combined in the multi-modal setting to assist high level decisions and gaming context. The exact set of features will vary from project to project (depending on the application and the user group), but in general the following parameters, for example, are likely to be used in all projects:

- Voice Pitch
- Gesture
- Posture
- Motion data
- Emotion

The devices on which products will be implemented on do vary from project to project. However, platform-independence and portability is desirable in all cases, as a goal is to reach as many potential users as possible. Solutions to these issues can be shared across projects:

- How to support several different devices
- How to support several different operating Systems

- Closed devices, running without network access to a backend server
- Tablets/Phones: How suitable are they for accessing the games

Aspects of marketing and deployment will be similar across projects and solutions should be shared in order to help all three projects' products to be as successful as possible. Issues to address include: how to deploy the application, either as standalone distribution installable on a user's device, or as a web-based application, requiring no installation. Further, pricing and charging models must be developed. This can be shared across projects.

All projects will involve Machine Learning algorithms for analysing user input and behaviour, and adapting the dialogue or game to the user's profile and the current context. Thus, the projects can share training and evaluation data where applicable, possibly share common evaluation methods and standards, to ensure comparability of results, and share code and experience on machine learning algorithms and implementations. Also, methods on how to best dynamically collect user data, and build a user profile, while the user is interacting and using the product naturally can be shared across the three projects.

User profile data collected must be stored on server systems in a distributed, cloud/server-based system. Proficient technical solutions are required to keep this data safe. Strategies of how to ensure data security are crucial to each individual project's acceptance and success, and thus should be clustered to minimize any unnecessary double work, and instead focus on building a really secure and well-made server side of the systems.

7.9.1 WORK PLAN

Representatives of the three projects will share technical solutions on:

- Architectural details
- API information
- Integration of components
- Re-use of components and platforms
- Standards implemented and followed
- Choice of middleware

Furthermore, solutions adopted for platform-independence and portability will be exchanged. Representatives of the projects will also share training and evaluation data as well as code and experience on machine learning algorithms and implementations.

7.10 COMPARISON OF APPROACHES

This section compares the approaches of the three projects.

The first issue discussed was, how the game character of the product manifests itself and how it brings fundamental added value to the projects. It was discussed how the term "game" is defined, what a game is, etc. First, the definition "something kids are doing" was suggested, but was objected. Next, a wider definition of game was discussed, such as describing a game as an "engaging system" or "playful activity", which found reasonable acceptance. Another alternative definition was given as: "engaging environment that promotes users to do the 'wanted' activities through a reward system of virtual goods, levels, status, and collectable items".

One major challenge identified is the Gap in attractiveness of "serious games" and regular games (for entertainment purposes only). Suggested ways to bridge these gaps

include: offering users the game in school environments, where the game will be preferred over standard teaching activities, giving users some kind of external benefit, e.g. toys, gifts, monetary reward, certificates, to encourage their participation, or installing a person as a carer, who will supervise and motivate the user in his interaction with the game.

The last issue discussed was, how we take motivational elements from "games practice" that can be extended to the non-leisure areas? Proposed ideas were:

- Share information and raise awareness from the gaming world into the other field/domain.
- The key challenge is sharing this information on how gaming techniques can create engagement/motivation/adoption and impact.
- Between the groups online seminars can be done to discuss test cases and ideas from the gaming field to motivate/affect the needed activities (learning/helping others etc.).
- Examples and test cases can be shared.

7.10.1 WORK PLAN

Representatives of the three projects will share approaches on how to bridge gap from normal to serious games, such as giving users some kind of external benefit (gifts price awards). They will share sharing this information on how gaming techniques can create engagement/motivation/adoption and impact, including examples and test cases to motivate and affect the needed activities.

7.11 ORGANIZATION OF NEXT DGEI CLUSTERING WORKSHOPS

The DGEI cluster envisions to schedule two other workshops:

- A second closed workshop meeting for all members of the three projects, (M18, Brussels) to make a statement on the status of the play of performed, on-going, and future DGEI clustering activities.
- An open workshop/conference with international impact on inclusion and serious gaming, with participation of academics, representatives from industry, NGOs, and administrations whose activities are related to social inclusion (M30, M33).

7.11.1 DGEI CLUSTER M18 – INTERNAL

The second closed workshop could be held in Brussels, Graz, or Paris, close in time to internal events in order to cluster with them. The **proposed date is Thursday 11 April 2013**. The workshop envisions the exchange of the state of the projects and the exchange of clustering experiences so far. It will comprise workgroup sessions to adjust the clustering activities.

European commission's officials are invited as well as the advisory board. It remains to be discussed how far the invitation will be extended to external cluster partners.

7.11.2 M 30 – 33 INTERNATIONAL EVENT

The open workshop/conference will be held from April to July 2014 and it will be the first International Workshop/Conference on DGEI. It should be a stand-alone (not satellite) event or attached to a conference such as the Conference on Human Factors in Computing Systems (ACM CHI) and the Human-Computer Interaction international conference (HCI). It should comprise single or double track and posters, industry exhibitions, invited speakers (one from

industry and one from an NGO), industry sponsors, and society sponsors (ACM, IEEE). The workshop is planned to host about 200 participants. Proceedings could be published by Springer or a similar publisher, and special issues in related journals could host invited follow-up articles.

The workshop consists of plenary sessions with poster presentations and optionally talks given by participants, and panel sessions with discussions of invited experts. The DGEI partners will serve as peer-reviewers for the submissions.

7.12 7.12 FURTHER CLUSTERING POTENTIAL

This section enumerates the potential further clustering with other related projects that could be taken in account.

GALA network (2012-2014/15)

Games and Learning Alliance www.galanoe.eu

- Apply for associate partnership, every partner can join
- Present the DGEI clustering project

euCogIII

European Network for the Advancement of Artificial Cognitive Systems, Interaction and Robotics <http://bit.ly/HTbuCT>

- Apply for associate partnership (technical partners)
- Present the DGEI clustering project

FET flagship pilots FutureICT

Well funded initiative promotes most innovative ICT technologies for social change, www.futurict.eu/

ATIS4all

European Thematic Network on Assistive Technologies and Inclusive Solutions for All, ICT-PSP www.atis4all.eu

- Platform for dissemination
- Autism Europe is closely linked to the EDF (European Disability Forum)
- ONCE Foundation (E) is coordinator; **CURE**, EPR, AGE

Specifically oriented networks

Inform also from any **specifically oriented networks**, e.g., **ENAR** (European Network against Racism); AALliance (AAL JP network) and any other socially oriented European platforms (NGOs could help in finding out): **IOM Migration Health** www.iom.int (social & economic aspects on migration & health)

7.12.1 WORK PLAN

Representatives of the three projects will explore the proposed additional clustering and decide the possibility to cluster.

8. WORK PLAN OVERVIEW

| Cf. Sec. | Clustering activity | Deadline (time of the year) | Month (ASC) | Month (MASELTOV) | Month (TARDIS) |
|----------|--|--------------------------------|----------------|---------------------|-------------------|
| 7.1.5 | A specific page on DGEI clustering will be created in each of the websites | 06/2012 | | M6 | |
| | | | | | |
| | | | | | |
| | | | | | |

9. CONCLUSIONS

Summing up, a first closed workshop for all members of the three projects has been held in Brussels on 19 April 2012. The DGEI clustering workshop envisioned presentations of the different research groups and discussion about clustering activities which have been submitted by the members to the DGEI clustering wiki (<http://dgeiclustering.pbworks.com>).

The outcome of this workshop is a prolific discussion on the following topics:

- Common dissemination channels
- Common exploitation
- Common success indicators
- Exchange of lessons learned
- Exchange of user requirements
- Exchange of validation methodologies
- Sharing of engineering requirements
- Sharing of methodologies
- Sharing of technical solutions
- Comparison of approaches (for complementarities and/or comparison)
- Organization of the next DGEI clustering workshops (internal in M18 in Brussels, international in M30 - M33, etc.)
- Further clustering potential (e.g., GALA network)

Furthermore, it has been discussed what the suggested strategies and synergies to adopt for each activity are, providing a work plan to achieve the potential clustering ideas.

Aside from what mentioned above it has been planned a long-term exchange of key personal to partner sites for in the near future.

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