

## **COLDEX**



# **Collaborative Learning and Distributed Experimentation**

**Information Society Technologies Programme  
Project Number: IST-2001-32327**

### **Technology Implementation Plan / Exploitation Plan**

**Contractual Date of Delivery:** M33  
**Actual Date of Delivery:** M36  
**Version:** Final  
**Contributing Partner:** UDUI  
**Authors:** Hoppe, Ulrich; Oelinger, Maria  
**Contact:** [hoppe@collide.info](mailto:hoppe@collide.info)

# Table of Contents

COLDEX .....	1
Collaborative Learning and Distributed Experimentation .....	1
1       General .....	3
2       Exploitation .....	3
2.1   SKYWATCH AS IDEAL EXPLOITATION GROUND FOR THE ASTRONOMY SCENARIO .....	3
2.2   TAKE-UP IN IMPLEMENT TECHNOLOGIES IN SCIENCE CENTRES .....	3
2.2.1 XPERIMENT Huset, SWEDEN .....	4
2.2.2 EUROPEAN PROJECT CONNECT .....	4
2.2.3 EUROPEAN RESOURCE CENTRE PENCIL .....	5
2.3   TAKE UP IN IMPLEMENT TECHNOLOGIES IN SCHOOLS .....	5
2.3.1 ARABY SCHOOL (VÄXJÖ) .....	5
2.3.2 SCHOOLS IN GERMANY .....	6
2.3.3 "GERMAN SCHOOLS" .....	6
2.3.4 COLDEX EXPLOITATION IN LATIN-AMERICA .....	7
3       Technology Implementation Plan .....	8

## **1 General**

This deliverable represents the the exploitation plan and technology implementation plan. The first part contains the planned exploitation of the project scenarios, tools, system, and outcomes. Besides the plans mentioned in chapter 2 we expect that some more exploitation will take place in the near future, since the project was very positively assessed by all participants, students, teachers and multipliers.

The second part presents the technology implementation plan (TIP). Please note that the TIP is a copy of a web form. The result-related exploitation is listed in that form.

## **2 Exploitation**

This chapter contains the exploitation plan of the COLDEX project. Several activities have been initiated within the projects' lifetime and will continue in the future, some are planned for the 18 months of the consortium's commitment of support.

### ***2.1 SKYWATCH as ideal exploitation ground for the astronomy scenario***

In the European project SkyWatch interested pupils, students, and young amateur scientists can explore the fascinating world of astronomy. The project arranges a pan-European astronomy competition, publishes learning material via the world wide web, provides remote telescope access and organises a large community of astronomic beginners and experts. Taking the focus of SkyWatch into account, the COLDEX astronomy scenario can easily be embedded.

### ***2.2 Take-up in implement technologies in science centres***

Science centres are the ideal place to motivate learners who may not like the formal way of learning inside the school and curricular system. The following sections describe how and where COLDEX learning can be transferred from the more formal environments to the rather informal and extracurricular science centres and museums.

### **2.2.1 Xperiment Huset, Sweden**

Xperiment Huset will use Cool Modes and other tools further on, i.e. astronomy scenario, stochastics and maze scenario. The educational experts at the Xperiment Huset plan to integrate COLDEX scenarios in the science centre for a longer time. They will go on using innovative installations like the robot in a maze, and the "smart planets" (so far a demonstrator, but then a running part of the astronomy scenario). Furthermore, there is a workshop planned for June about the usage of smart planets in the science centre, including technology (RFID) and embedding of this module into the astronomy scenario along with CRATER. School and teacher workshops will take place about the astronomy scenario as well as the probabilities in the stochastics scenario. Since this science centre and science museum is part of a European network of science centres ([www.ecsite.net](http://www.ecsite.net)), the long term perspective of COLDEX scenarios is given here. As a positive outcome of the project, both sides will benefit from this combination of science and on-going practical activities with learners.

### **2.2.2 European project CONNECT**

The European CONNECT aims at connecting formal and informal forms of learning. The scenarios developed in COLDEX can be used in this context. Of course, the LOR is open for the user group which is addressed in the CONNECT. Thus a knowledge and artefact transfer will be possible. Additionally, further development of exhibits, e.g. the BioTube are planned. Several science centres are involved in the CONNECT project:

- @BRISTOL - At-Bristol Ltd United Kingdom, [www.at-bristol.org.uk/](http://www.at-bristol.org.uk/)
- Eugenides Foundation Greece, [www.eugenfound.edu.gr/](http://www.eugenfound.edu.gr/)
- HEUREKA - The Finnish Science Center Finland, [www.heureka.fi/](http://www.heureka.fi/)
- ECSITE - European Collaborative for Science, Industry and Technology Exhibition Belgium, [www.ecsite.net/](http://www.ecsite.net/)

The project website is available:

<http://www4.ellinogermaniki.gr/ep/Connect/index.asp>

### **2.2.3 European Resource Centre PENCIL**

PENCIL – Permanent European Resource Centre for Informal Learning – combines field programmes and academic research with the aim of identifying the keys of success that transform informal science activities into innovative quality tools for science teaching. Several science centres or museums are creating mini-networks involving schools, pupils, teachers associations, research laboratories, educational authorities, education and science communication specialists to run "pilot projects" on new ways to conduct science teaching. Therefore, PENCIL is a network of fourteen thematically different pilot-projects.

More information about the PENCIL project is presented in the website:

<http://xplora.eun.org/pencil.htm>

### **2.3 Take up in implement technologies in schools**

Most of the teachers and schools which have already conducted experiments plan further workshops and lessons sequences. DExTs can be provided for schools as permanent loans. The "Teachers' Guide" (currently developed) will enable teachers to use the COLDEX scenarios in their learning context.

#### **2.3.1 Araby school (Växjö)**

This Swedish school – which has won an award partly because of COLDEX – will conduct projects "Mission Mars" in the context of the biodiversity scenario and "Lunar Cartography" in the astronomy scenario. The Swedish teachers are highly interested in more of the biodiversity ideas, but also in all space-related learning materials since they have found the space exploration very motivating for their students.



### **2.3.2 Schools in Germany**

The teachers from Germany who have taken part with activities plan to conduct some more workshop and lessons sequences. There are also events like the "Day of Technology" which will take place once in a year. This will be the perfect ground on which more teachers and schools can be concerned. Some of the teachers who visited the "Day of Technology 2004" are interested in conducting the scenarios they've seen but not participated themselves.

Some of the teachers are involved in a European school project and are interested to use COLDEX innovations to enrich their activities there. The advantage to serve these groups from the COLDEX view is that the students have to improve not only their scientific work modes, but also their English so the cultural exchange with other bilingual students (e.g. the Swedish students) is easy.

### **2.3.3 "German Schools"**

Chilean "German Schools" all over the world have been already contacted for expanding the OUS community and thus enlarge the learning community. The first activities have already been conducted in the "German School" in Santiago de Chile.



**Figure 1.** Students at the German School in Santiago de Chile

After the introduction into modelling and first examples like a population and birth system with the System Dynamics scenario the students there had two main challenges.

On the one hand they modelled an ecologically motivated topic: exploiting the native woods in the south of Chile. Another question dealt with the public transport system of Santiago: Rethinking of the public transport in order to get rid of at least some 2000 buses. Some more details of this activities can be seen in the video interview with Nelson Baloian which is part of the deliverables area of the COLDEX website: [www.coldex.info](http://www.coldex.info) > deliverables.

#### **2.3.4 COLDEX exploitation in Latin-America**

A Colombian project induced by Prof. Luis Maldonado will use COLDEX materials and conduct activities with COLDEX scenarios. There the combination of the modelling tools Cool Modes and SIMAS (a semantic modelling tool) will be used to support the cognitive aspects in collaborative learning. So, using the broader range of two modelling environments with the support of the learning object repository, the cognitive learning processes will be in the focus of this project.

# TECHNOLOGICAL IMPLEMENTATION PLAN

## Description of project

<b>EC PROGRAMME:</b>	<b>IST</b>
<b>PROJECT TITLE:</b>	COLlaborative Learning and Distributed Experimentation
<b>ACRONYM:</b>	<b>COLDEX</b>
<b>PROGRAMME TYPE:</b>	5th FWP (Fifth Framework Programme)
<b>CONTRACT NUMBER:</b>	IST-2001-32327
<b>PROJECT WEB SITE (if any):</b>	<a href="http://www.coldex.info">http://www.coldex.info</a>
<b>START DATE:</b>	01 Jun 2002
<b>END DATE:</b>	31 May 2005
<b>COORDINATOR DETAILS:</b>	<b>Name:</b> Maria Oelinger <b>Organisation:</b> University of Duisburg-Essen <b>Address:</b> Lotharstrasse 63, 47057 Duisburg, Germany <b>Telephone:</b> 00492033791329 <b>E-mail:</b> oelinger@informatik.uni-duisburg.de

### PARTNERS NAME:

**FUNDACION UNIVERSIDAD EMPRESA**, Maria Felisa VERDEJO  
**UNIVERSIDAD POLITECNICA DE MADRID**, Ana M. GARCIA-SERRANO  
**UNIVERSIDAD CATOLICA DEL NORTE**, Miguel MURPHY  
**INESC ID - INSTITUTO DE ENGENHARIA DE SISTEMAS E COMPUTADORES:**  
**INVESTIGACAO E DESENVOLVIMENTO EM LISBOA**, Ana PAIVA  
**UNIVERSITAET DES SAARLANDES**, Stephan DIEHL  
**VAEXJOE UNIVERSITET**, Marcelo MILRAD  
**UNIVERSIDAD DE CHILE**, Nelson BALOIAN  
**Universität Duisburg-Essen**, Ulrich Hoppe

<b>Commission Officer Name:</b>	Carlos Oliveira
---------------------------------	-----------------

### Executive summary

#### Original research objectives

COLDEX aims at developing and using new IT approaches and computational tools to foster scientific experimentation, modelling and simulation in distributed collaborative settings in an inter-cultural (European-Latin American) community of learners. Our efforts will result in the creation of innovative pedagogical scenarios. A common denominator for the learning domain is the study of visual and other perceptual phenomena, including astronomical and seismic measurements, from both a scientific and a subjective experiential perspective. The project will start with local learning communities sharing a rich everyday context. The target groups will range from higher secondary education to academic beginners. Computer-mediated collaboration tools will contribute to forming integrated synchronous/asynchronous access to a



"group memory" on different levels.

### Expected deliverables

D1.2.1: COLDEX Web site D1.3.1: Quality Plan D1.4.1: Dissemination Plan D2.2.1: Learning Requirements D2.2.2: Collaborative Scenarios D2.3.1: Learning Activity Design D2.3.2: Evaluation Plan D3.2.1: COLDEX Toolbox D3.2.2: The Toolbox Documentation D4.2/3.1: System prototype (implementation of the remote experiments) D5.2/3.1: System Prototype (implementation of the local experiments) D6.1.1: Network specification D6.2/3.1: System Prototype (implementation of the network of servers) D7.2.1: Learning material and guidelines D7.2.2: Functional documentation D7.3.1: System Report D8.1.1: Evaluation Plan D8.3.1: Evaluation Report

### Project's actual outcome

D1.2.1 Project Presentation - COLDEX Project Video - COLDEX Flyer - COLDEX OUS Flyer - COLDEX Poster D1.3.1 Quality Plan D1.4.1 Dissemination and Use Plan D2.2.1 Learning Requirements D2.2.2 Collaborative Learning Scenarios D2.3.1 Learning Activity Design D2.3.2 Evaluation Plan I: Methodology and Examples D3.2.1 COLDEX Toolbox / D3.2.2 The Toolbox Documenation D4.2.1/D4.3.1 Remote Scenarios - Description of System Prototypes D5.2.1/D5.3.1 Local Scenarios - Description of System Prototypes D6.1.1 Network Specification D6.2.1 Coldex Portal Access Guidelines (prototype 1) D6.3.1 Coldex System Architecture Summary - Addenda: Network Specifications - Distributed Issues for COLDEX System Architecture D7.2.1 Learning Material and Guidelines D7.2.2 Functional Documentation - Addenda: Metadata Definitions - Addenda: Tools Integration D7.3.1 System Report - Learning Object Repository: Tutorial LOR English - Learning Object Repository: Tutorial LOR Spanish D8.1.1 Evaluation Plan II: Specialised Evaluation and Test Plan D8.3.1 Evaluation Report - Questionnaires - Observation Collaboration Rubrics \* Software is freely available for non-commercial (mainly educational) purposes; for commercial use the copyrights stay with the main developers

### Broad dissemination and use intentions for the expected outputs

\* "Bundled" learning materials (DExTs) in different areas of science and technology under the general theme of "space exploration" \* Provision of a community support infrastructure (replicable) both web-based and integrated with specific software tools \* Intended use: the sets of learning materials (DExTs), tools and evaluation instruments to be acquired by teachers or informal learning institutions (science centres) with the intention to participate in a globally networked community

### Overview of all your main project results

No.	Self-descriptive title of the result	Category A, B or C*	Partner(s) owning the result (s) (referring in particular to specific patents, copyrights, etc.) & involved in their further use
1	Maze scenario (tool, learning material)	A	University of Duisburg-Essen
2	Crater scenario	A	UNIVERSITAET DES SAARLANDES
3	Moon cartography	A	University of Duisburg-Essen
4	Biotube	A	VAEXJOE UNIVERSITET
5	Evaluation instruments	B	VAEXJOE UNIVERSITET University of Duisburg-Essen
6	Questionnaire translation procedure	B	VAEXJOE UNIVERSITET University of Duisburg-Essen
7	Contribution to LOM	A	FUNDACION UNIVERSIDAD EMPRESA

\*A: results usable outside the consortium / B: results usable within the consortium / C: non usable results

### Quantified Data on the dissemination and use of the project results

--	--	--

<b>Items about the dissemination and use of the project results (consolidated numbers)</b>	<b>Currently achieved quantity</b>	<b>Estimated future* quantity</b>
Product innovations	5	5
Process innovations	1	1
New services (commercial)	0	2
New services (public)	2	2
New methods	0	0
Scientific breakthrough	2	2
Technical standards to which this project has contributed	1	1
EU regulations/directives to which this project has contributed	0	0
International regulations to which this project has contributed	0	0
PhDs generated by the project	2	3
Grantees/trainees including transnational exchange of personnel	4	4

\* "Future" means expectations within the next 3 years following the end of the project

### **Comment on European Interest**

#### Community added value and contribution to EU policies

<p><b>European dimension of the problem</b> The European dimension of the project is to connect learners in a multi-cultural, even inter-continental learning context. The collaboration of learners is one of the topics to be investigated in COLDEX. There are several aspects concerning this aim: how to support it technically, and how to implement it pedagogically. The collaboration may be synchronous for small groups, but mainly asynchronous for the whole COLDEX community.</p>
<p><b>Contribution to developing S&amp;T co-operation at international level. European added value</b> The lessons learnt from working together in the European project COLDEX with additional partners in Latin America, are mainly three achievements. First, the example of an outreach from Europe to Latin America beyond "scientific exchange" turned out to be very successful. Especially the activities with the OUS partners from Chile and Colombia have proved that the objective of being in this sense trans-continental and aiming at cross-fertilisation of experience and scientific understanding in a multicultural and multi-experiential community worked very well. Another positive result is the mix of "Scandinavian" with other (positivistic?) approaches. Last, but not least, the impact in the scientific community (as a cooperative EU project) is just a start for such-like projects in the future, we foresee.</p>
<p><b>Contribution to policy design or implementation</b> -</p>

#### Contribution to Community social objectives

<p><b>Improving the quality of life in the Community:</b> -</p>
<p><b>Provision of appropriate incentives for monitoring and creating jobs in the Community (including use and development of skills):</b> -</p>
<p><b>Supporting sustainable development, preserving and/or enhancing the environment (including use/conservation of resources):</b> -</p>

### **Expected project impact (to be filled in by the project coordinator)**

	<b>II</b>
--	-----------

EU Policy Goals	I SCALE OF EXPECTED IMPACT OVER THE NEXT 10 YEARS -1 0 1 2 3	other	
		Not applicable to project	Project Impact too difficult to estimate
1. Improved sustainable economic development and growth, competitiveness	1		
2. Improved employment	0	√	
3. Improved quality of life and health and safety	0	√	
4. Improved education	3		
5. Improved preservation and enhancement of the environment	0	√	
6. Improved scientific and technological quality	2		
7. Regulatory and legislative environment	0	√	
8. Other	0	√	

1. Economic development and growth, competitiveness	Scale of Expected Impacts over the next 10 years (2)	
	By Project End -1 0 1 2 3	After Project End -1 0 1 2 3
a) Increased Turnover for project participants - national markets	0	0
b) Increased Turnover for project participants - international markets	0	0
c) Increased Productivity for project participants	0	0
d) Reduced costs for project participants	0	0
e) Improved output quality/high technology content	1	1

2. Employment	Scale of Expected Impacts over the next 10 years (2)	
	By Project End -1 0 1 2 3	After Project End -1 0 1 2 3
a) Safeguarding of jobs		
b) Net employment growth in projects participants staff		
c) Net employment growth in customer and supply chains		
d) Net employment growth in the European economy at large		

3. Quality of Life and health and safety	Scale of Expected Impacts over the next 10 years (2)	
	By Project End -1 0 1 2 3	After Project End -1 0 1 2 3

a) Improved health care	
b) Improved food, nutrition	
c) Improved safety (incl. consumers and workers safety)	
d) Improved quality of life for the elderly and disabled	
e) Improved life expectancy	
f) Improved working conditions	
g) Improved child care	
h) Improved mobility of persons	

<b>4. Improved education</b>	<b>Scale of Expected Impacts over the next 10 years (2)</b>	
	<b>By Project End</b> -1 0 1 2 3	<b>After Project End</b> -1 0 1 2 3
a) Improved learning processes including lifelong learning	3	2
b) Development of new university curricula	1	2

<b>5. Preservation and enhancement of the environment</b>	<b>Scale of Expected Impacts over the next 10 years (2)</b>	
	<b>By Project End</b> -1 0 1 2 3	<b>After Project End</b> -1 0 1 2 3
a) Improved prevention of emissions		
b) Improved treatment of emissions		
c) Improved preservation of natural resources and cultural heritage		
d) Reduced energy consumption		

<b>6. S&amp;T quality</b>	<b>Scale of Expected Impacts over the next 10 years (2)</b>	
	<b>By Project End</b> -1 0 1 2 3	<b>After Project End</b> -1 0 1 2 3
a) Production of new knowledge	1	0
b) Safeguarding or development of expertise in a research area	0	0
c) Acceleration of RTD, transfer or uptake	0	0
d) Enhance skills of RTD staff	0	0
e) Transfer expertise/know-how/technology	1	0
f) Improved access to knowledge-based networks	2	2
g) Identifying appropriate partners and expertise	1	0
h) Develop international S&T co-operation	2	2
i) Increased gender equality	0	0

<b>7. Regulatory and legislative environment</b>	<b>Scale of Expected Impacts over the next 10 years (2)</b>
--	---

	<b>By Project End</b> -1 0 1 2 3	<b>After Project End</b> -1 0 1 2 3
a) Contribution to EU policy formulation		
Contribution to EU policy implementation		

<b>8. Other (please specify)</b>	<b>Scale of Expected Impacts over the next 10 years (2)</b>	
	<b>By Project End</b> -1 0 1 2 3	<b>After Project End</b> -1 0 1 2 3

## Description of Results

No.	Title
1	Maze scenario (tool, learning material)

### CONTACT PERSON FOR THIS RESULT

Name	Ulrich Hoppe
Position	Project co-ordinator
Organisation	University of Duisburg-Essen
Address	Lotharstr. 65 47057, Duisburg Germany
Telephone	+49-203-3793553
Fax	+49-203-3793557
E-mail	hoppe@collide.info
URL	<a href="http://www.uni-duisburg-essen.de">http://www.uni-duisburg-essen.de</a>
Specific Result URL	<a href="http://www.collide.info">http://www.collide.info</a>

### SUMMARY

### SUBJECT DESCRIPTORS CODES

### DOCUMENTATION AND INFORMATION ON THE RESULT

Documentation type	Details (Title, ref. number, general description, language)	Status: PU=Public CO=Confidential

### INTELLECTUAL PROPERTY RIGHTS

Type of IPR	KNOWLEDGE: Tick a box and give the corresponding details (reference numbers, etc) if appropriate				Pre-existing know-how Tick a box and give the corresponding details (reference numbers, etc) if appropriate		
	Current				Foreseen	Tick	Details
	Tick	NoP <sup>1)</sup>	NoI <sup>2)</sup>	Details	Tick		
Patent applied for							
Patent granted							
Patent search carried out							
Registered design							
Trademark applications							

Copyrights						
Secret know-how						
Other - please specify:						

- 1) Number of **P**riority (national) applications/patents
- 2) Number of **I**nternationally extended applications/patents

### MARKET APPLICATION SECTORS

<b>Market application sectors</b>
72 Computer and related activities
80 Education

### CURRENT STAGE OF DEVELOPMENT

<b>Current stage of development</b>	Other (please specify.):
<b>Other:</b>	Learning scenario

### Quantified data about the result

Items (about the results)	Actual current quantity	Estimated (or future) quantity
Time to application / market (in months from the end of the research project)	1	1
Number of (public or private) entities potentially involved in the implementation of the result:	1	1
of which: number of SMEs:	0	0
of which: number of entities in third countries (outside EU):	0	0
Targeted user audience: of reachable people	200	
S&T publications (referenced publications only)		
publications addressing general public (e.g. CD-ROMs, WEB sites)	2	3
publications addressing decision takers / public authorities / etc.		
Visibility for the general public	YES	

### Further collaboration, dissemination and use of the result

#### COLLABORATIONS SOUGHT

<b>R&amp;D</b>	Further research or development		<b>FIN</b>	Financial support	
<b>LIC</b>	Licence agreement		<b>VC</b>	Venture capital/spin-off funding	
<b>MAN</b>	Manufacturing agreement		<b>PPP</b>	Private-public partnership	
<b>MKT</b>	Marketing agreement		<b>INFO</b>	Information exchange/training	√
<b>JV</b>	Establish a joint enterprise or partnership		<b>CONS</b>	Available for consultancy	
<b>Other</b>	(please specify)				
<b>Details:</b>					

### POTENTIAL OFFERED FOR FURTHER DISSEMINATION AND USE

### PROFILE OF ADDITIONAL PARTNER(S) FOR FURTHER DISSEMINATION AND USE

No.	Title
2	Crater scenario

### CONTACT PERSON FOR THIS RESULT

Name	Stephan DIEHL
Position	-
Organisation	UNIVERSITAET DES SAARLANDES
Address	Postfach 151150 66123, SAARBRUECKEN GERMANY
Telephone	+49-68-13023915
Fax	+49-68-13023065
E-mail	diedl@cs.uni-sb.de
URL	
Specific Result URL	

### SUMMARY

### SUBJECT DESCRIPTORS CODES

### DOCUMENTATION AND INFORMATION ON THE RESULT

Documentation type	Details (Title, ref. number, general description, language)	Status: PU=Public CO=Confidential

### INTELLECTUAL PROPERTY RIGHTS

Type of IPR	KNOWLEDGE: Tick a box and give the corresponding details (reference numbers, etc) if appropriate				Pre-existing know-how Tick a box and give the corresponding details (reference numbers, etc) if appropriate		
	Current				Foreseen	Tick	Details
	Tick	NoP <sup>1)</sup>	NoI <sup>2)</sup>	Details	Tick		
Patent applied for							
Patent granted							
Patent search carried out							
Registered design							
Trademark applications							
Copyrights							
Secret know-how							
Other - please specify:							

1) Number of **P**riority (national) applications/patents



2) Number of Internationally extended applications/patents

**MARKET APPLICATION SECTORS**

**Market application sectors**

**CURRENT STAGE OF DEVELOPMENT**

**Current stage of development**

**Other:**

**Quantified data about the result**

<b>Items (about the results)</b>	<b>Actual current quantity</b>	<b>Estimated (or future) quantity</b>
Time to application / market (in months from the end of the research project)		
Number of (public or private) entities potentially involved in the implementation of the result:		
of which: number of SMEs:		
of which: number of entities in third countries (outside EU):		
Targeted user audience: of reachable people		
S&T publications (referenced publications only)		
publications addressing general public (e.g. CD-ROMs, WEB sites)		
publications addressing decision takers / public authorities / etc.		
Visibility for the general public	YES	

**Further collaboration, dissemination and use of the result**

**COLLABORATIONS SOUGHT**

<b>R&amp;D</b>	Further research or development		<b>FIN</b>	Financial support	
<b>LIC</b>	Licence agreement		<b>VC</b>	Venture capital/spin-off funding	
<b>MAN</b>	Manufacturing agreement		<b>PPP</b>	Private-public partnership	
<b>MKT</b>	Marketing agreement		<b>INFO</b>	Information exchange/training	
<b>JV</b>	Establish a joint enterprise or partnership		<b>CONS</b>	Available for consultancy	
<b>Other</b>	(please specify)				
<b>Details:</b>					

**POTENTIAL OFFERED FOR FURTHER DISSEMINATION AND USE**

**PROFILE OF ADDITIONAL PARTNER(S) FOR FURTHER DISSEMINATION AND USE**

No.	Title
3	Moon cartography

### CONTACT PERSON FOR THIS RESULT

Name	Maria Oelinger
Position	Administrative Coordinator
Organisation	University of Duisburg-Essen
Address	Lotharstrasse 63 47057, Duisburg Germany
Telephone	00492033791329
Fax	00492033793557
E-mail	oelinger@informatik.uni-duisburg.de
URL	
Specific Result URL	

### SUMMARY

### SUBJECT DESCRIPTORS CODES

### DOCUMENTATION AND INFORMATION ON THE RESULT

Documentation type	Details (Title, ref. number, general description, language)	Status: PU=Public CO=Confidential

### INTELLECTUAL PROPERTY RIGHTS

Type of IPR	KNOWLEDGE: Tick a box and give the corresponding details (reference numbers, etc) if appropriate				Pre-existing know-how Tick a box and give the corresponding details (reference numbers, etc) if appropriate		
	Current				Foreseen	Tick	Details
	Tick	NoP <sup>1)</sup>	NoI <sup>2)</sup>	Details	Tick		
Patent applied for							
Patent granted							
Patent search carried out							
Registered design							
Trademark applications							
Copyrights							
Secret know-how							
Other - please specify:							

1) Number of Priority (national) applications/patents

2) Number of Internationally extended applications/patents

**MARKET APPLICATION SECTORS**

**Market application sectors**

**CURRENT STAGE OF DEVELOPMENT**

**Current stage of development**

**Other:**

**Quantified data about the result**

Items (about the results)	Actual current quantity	Estimated (or future) quantity
Time to application / market (in months from the end of the research project)		
Number of (public or private) entities potentially involved in the implementation of the result:		
of which: number of SMEs:		
of which: number of entities in third countries (outside EU):		
Targeted user audience: of reachable people		
S&T publications (referenced publications only)		
publications addressing general public (e.g. CD-ROMs, WEB sites)		
publications addressing decision takers / public authorities / etc.		
Visibility for the general public	YES	

**Further collaboration, dissemination and use of the result**

**COLLABORATIONS SOUGHT**

<b>R&amp;D</b>	Further research or development		<b>FIN</b>	Financial support	
<b>LIC</b>	Licence agreement		<b>VC</b>	Venture capital/spin-off funding	
<b>MAN</b>	Manufacturing agreement		<b>PPP</b>	Private-public partnership	
<b>MKT</b>	Marketing agreement		<b>INFO</b>	Information exchange/training	
<b>JV</b>	Establish a joint enterprise or partnership		<b>CONS</b>	Available for consultancy	
<b>Other</b>	(please specify)				
<b>Details:</b>					

**POTENTIAL OFFERED FOR FURTHER DISSEMINATION AND USE**

**PROFILE OF ADDITIONAL PARTNER(S) FOR FURTHER DISSEMINATION AND USE**

No.	Title
4	Biotube

#### CONTACT PERSON FOR THIS RESULT

Name	Marcelo MILRAD
Position	-
Organisation	VAEXJOE UNIVERSITET
Address	UNIVERSITEITSPLATSEN 1 351 95, VAEXJOE SWEDEN
Telephone	+46-47-0708669
Fax	+46-47-084004
E-mail	marcelo.milrad@msi.vxu.se
URL	
Specific Result URL	

#### SUMMARY

#### SUBJECT DESCRIPTORS CODES

#### DOCUMENTATION AND INFORMATION ON THE RESULT

Documentation type	Details (Title, ref. number, general description, language)	Status: PU=Public CO=Confidential

#### INTELLECTUAL PROPERTY RIGHTS

Type of IPR	KNOWLEDGE: Tick a box and give the corresponding details (reference numbers, etc) if appropriate				Pre-existing know-how Tick a box and give the corresponding details (reference numbers, etc) if appropriate		
	Current				Foreseen	Tick	Details
	Tick	NoP <sup>1)</sup>	NoI <sup>2)</sup>	Details	Tick		
Patent applied for							
Patent granted							
Patent search carried out							
Registered design							
Trademark applications							
Copyrights							
Secret know-how							
Other - please specify:							

1) Number of **P**riority (national) applications/patents

2) Number of Internationally extended applications/patents

**MARKET APPLICATION SECTORS**

**Market application sectors**

**CURRENT STAGE OF DEVELOPMENT**

**Current stage of development**

**Other:**

**Quantified data about the result**

Items (about the results)	Actual current quantity	Estimated (or future) quantity
Time to application / market (in months from the end of the research project)		
Number of (public or private) entities potentially involved in the implementation of the result:		
of which: number of SMEs:		
of which: number of entities in third countries (outside EU):		
Targeted user audience: of reachable people		
S&T publications (referenced publications only)		
publications addressing general public (e.g. CD-ROMs, WEB sites)		
publications addressing decision takers / public authorities / etc.		
Visibility for the general public	YES	

**Further collaboration, dissemination and use of the result**

**COLLABORATIONS SOUGHT**

<b>R&amp;D</b>	Further research or development		<b>FIN</b>	Financial support	
<b>LIC</b>	Licence agreement		<b>VC</b>	Venture capital/spin-off funding	
<b>MAN</b>	Manufacturing agreement		<b>PPP</b>	Private-public partnership	
<b>MKT</b>	Marketing agreement		<b>INFO</b>	Information exchange/training	
<b>JV</b>	Establish a joint enterprise or partnership		<b>CONS</b>	Available for consultancy	
<b>Other</b>	(please specify)				
<b>Details:</b>					

**POTENTIAL OFFERED FOR FURTHER DISSEMINATION AND USE**

**PROFILE OF ADDITIONAL PARTNER(S) FOR FURTHER DISSEMINATION AND USE**

No.	Title
5	Evaluation instruments

#### CONTACT PERSON FOR THIS RESULT

Name	Marcelo MILRAD
Position	-
Organisation	VAEXJOE UNIVERSITET
Address	UNIVERSITEITSPLATSEN 1 351 95, VAEXJOE SWEDEN
Telephone	+46-47-0708669
Fax	+46-47-084004
E-mail	marcelo.milrad@msi.vxu.se
URL	
Specific Result URL	

#### SUMMARY

#### SUBJECT DESCRIPTORS CODES

#### DOCUMENTATION AND INFORMATION ON THE RESULT

Documentation type	Details (Title, ref. number, general description, language)	Status: PU=Public CO=Confidential

#### INTELLECTUAL PROPERTY RIGHTS

Type of IPR	KNOWLEDGE: Tick a box and give the corresponding details (reference numbers, etc) if appropriate				Pre-existing know-how Tick a box and give the corresponding details (reference numbers, etc) if appropriate		
	Current				Foreseen	Tick	Details
	Tick	NoP <sup>1)</sup>	NoI <sup>2)</sup>	Details	Tick		
Patent applied for							
Patent granted							
Patent search carried out							
Registered design							
Trademark applications							
Copyrights							
Secret know-how							
Other - please specify:							

1) Number of Priority (national) applications/patents

2) Number of Internationally extended applications/patents

**MARKET APPLICATION SECTORS**

**Market application sectors**

**CURRENT STAGE OF DEVELOPMENT**

**Current stage of development**

**Other:**

**Quantified data about the result**

Items (about the results)	Actual current quantity	Estimated (or future) quantity
Time to application / market (in months from the end of the research project)		
Number of (public or private) entities potentially involved in the implementation of the result:		
of which: number of SMEs:		
of which: number of entities in third countries (outside EU):		
Targeted user audience: of reachable people		
S&T publications (referenced publications only)		
publications addressing general public (e.g. CD-ROMs, WEB sites)		
publications addressing decision takers / public authorities / etc.		
Visibility for the general public	YES	

**Further collaboration, dissemination and use of the result**

**COLLABORATIONS SOUGHT**

<b>R&amp;D</b>	Further research or development		<b>FIN</b>	Financial support	
<b>LIC</b>	Licence agreement		<b>VC</b>	Venture capital/spin-off funding	
<b>MAN</b>	Manufacturing agreement		<b>PPP</b>	Private-public partnership	
<b>MKT</b>	Marketing agreement		<b>INFO</b>	Information exchange/training	
<b>JV</b>	Establish a joint enterprise or partnership		<b>CONS</b>	Available for consultancy	
<b>Other</b>	(please specify)				
<b>Details:</b>					

**POTENTIAL OFFERED FOR FURTHER DISSEMINATION AND USE**

**PROFILE OF ADDITIONAL PARTNER(S) FOR FURTHER DISSEMINATION AND USE**

No.	Title
6	Questionnaire translation procedure

#### CONTACT PERSON FOR THIS RESULT

Name	Marcelo MILRAD
Position	-
Organisation	VAEXJOE UNIVERSITET
Address	UNIVERSITEITSPLATSEN 1 351 95, VAEXJOE SWEDEN
Telephone	+46-47-0708669
Fax	+46-47-084004
E-mail	marcelo.milrad@msi.vxu.se
URL	
Specific Result URL	

#### SUMMARY

#### SUBJECT DESCRIPTORS CODES

#### DOCUMENTATION AND INFORMATION ON THE RESULT

Documentation type	Details (Title, ref. number, general description, language)	Status: PU=Public CO=Confidential

#### INTELLECTUAL PROPERTY RIGHTS

Type of IPR	KNOWLEDGE: Tick a box and give the corresponding details (reference numbers, etc) if appropriate				Pre-existing know-how Tick a box and give the corresponding details (reference numbers, etc) if appropriate		
	Current				Foreseen	Tick	Details
	Tick	NoP <sup>1)</sup>	NoI <sup>2)</sup>	Details	Tick		
Patent applied for							
Patent granted							
Patent search carried out							
Registered design							
Trademark applications							
Copyrights							
Secret know-how							
Other - please specify:							

1) Number of **P**riority (national) applications/patents



2) Number of Internationally extended applications/patents

**MARKET APPLICATION SECTORS**

**Market application sectors**

**CURRENT STAGE OF DEVELOPMENT**

**Current stage of development**

**Other:**

**Quantified data about the result**

Items (about the results)	Actual current quantity	Estimated (or future) quantity
Time to application / market (in months from the end of the research project)		
Number of (public or private) entities potentially involved in the implementation of the result:		
of which: number of SMEs:		
of which: number of entities in third countries (outside EU):		
Targeted user audience: of reachable people		
S&T publications (referenced publications only)		
publications addressing general public (e.g. CD-ROMs, WEB sites)		
publications addressing decision takers / public authorities / etc.		
Visibility for the general public	YES	

**Further collaboration, dissemination and use of the result**

**COLLABORATIONS SOUGHT**

<b>R&amp;D</b>	Further research or development		<b>FIN</b>	Financial support	
<b>LIC</b>	Licence agreement		<b>VC</b>	Venture capital/spin-off funding	
<b>MAN</b>	Manufacturing agreement		<b>PPP</b>	Private-public partnership	
<b>MKT</b>	Marketing agreement		<b>INFO</b>	Information exchange/training	
<b>JV</b>	Establish a joint enterprise or partnership		<b>CONS</b>	Available for consultancy	
<b>Other</b>	(please specify)				
<b>Details:</b>					

**POTENTIAL OFFERED FOR FURTHER DISSEMINATION AND USE**

**PROFILE OF ADDITIONAL PARTNER(S) FOR FURTHER DISSEMINATION AND USE**

No.	Title
7	Contribution to LOM

#### CONTACT PERSON FOR THIS RESULT

Name	Maria Felisa VERDEJO
Position	-
Organisation	FUNDACION UNIVERSIDAD EMPRESA
Address	SERRANO JOVER 5, 7 28015, MADRID SPAIN
Telephone	+34-91-3986484
Fax	+34-91-5470652
E-mail	felisa@isi.uned.es
URL	
Specific Result URL	

#### SUMMARY

#### SUBJECT DESCRIPTORS CODES

#### DOCUMENTATION AND INFORMATION ON THE RESULT

Documentation type	Details (Title, ref. number, general description, language)	Status: PU=Public CO=Confidential

#### INTELLECTUAL PROPERTY RIGHTS

Type of IPR	KNOWLEDGE: Tick a box and give the corresponding details (reference numbers, etc) if appropriate				Pre-existing know-how Tick a box and give the corresponding details (reference numbers, etc) if appropriate		
	Current				Foreseen	Tick	Details
	Tick	NoP <sup>1)</sup>	NoI <sup>2)</sup>	Details	Tick		
Patent applied for							
Patent granted							
Patent search carried out							
Registered design							
Trademark applications							
Copyrights							
Secret know-how							
Other - please specify:							

1) Number of **P**riority (national) applications/patents

2) Number of Internationally extended applications/patents

**MARKET APPLICATION SECTORS**

**Market application sectors**

**CURRENT STAGE OF DEVELOPMENT**

**Current stage of development**

**Other:**

**Quantified data about the result**

Items (about the results)	Actual current quantity	Estimated (or future) quantity
Time to application / market (in months from the end of the research project)		
Number of (public or private) entities potentially involved in the implementation of the result:		
of which: number of SMEs:		
of which: number of entities in third countries (outside EU):		
Targeted user audience: of reachable people		
S&T publications (referenced publications only)		
publications addressing general public (e.g. CD-ROMs, WEB sites)		
publications addressing decision takers / public authorities / etc.		
Visibility for the general public	YES	

**Further collaboration, dissemination and use of the result**

**COLLABORATIONS SOUGHT**

<b>R&amp;D</b>	Further research or development		<b>FIN</b>	Financial support	
<b>LIC</b>	Licence agreement		<b>VC</b>	Venture capital/spin-off funding	
<b>MAN</b>	Manufacturing agreement		<b>PPP</b>	Private-public partnership	
<b>MKT</b>	Marketing agreement		<b>INFO</b>	Information exchange/training	
<b>JV</b>	Establish a joint enterprise or partnership		<b>CONS</b>	Available for consultancy	
<b>Other</b>	(please specify)				
<b>Details:</b>					

**POTENTIAL OFFERED FOR FURTHER DISSEMINATION AND USE**

**PROFILE OF ADDITIONAL PARTNER(S) FOR FURTHER DISSEMINATION AND USE**

## Exploitation plans

### CONFIDENTIAL

#### Description of the use and the dissemination of result(s), partner per partner

**CONTRACT NUMBER:**

IST-2001-32327

**PARTNER's NAME:**

University of Duisburg-Essen

#### CONTACT PERSON(S):

<b>Name</b>	Maria Oelinger
<b>Position/Title</b>	Administrative Coordinator/Ms
<b>Organisation</b>	University of Duisburg-Essen
<b>Address</b>	Lotharstrasse 63, Duisburg, 47057, Germany
<b>Telephone</b>	00492033791329
<b>Fax</b>	00492033793557
<b>E-mail</b>	oelinger@informatik.uni-duisburg.de

#### TITLE AND BRIEF DESCRIPTION OF MAIN RESULT(S)

#### TIMETABLE OF THE USE AND DISSEMINATION ACTIVITIES WITHIN THE NEXT 3 YEARS AFTER THE END OF THE PROJECT

#### FORESEEN COLLABORATIONS WITH OTHER ENTITIES

<b>R&amp;D</b>	Further research or development		<b>FIN</b>	Financial support	
<b>LIC</b>	Licence agreement		<b>VC</b>	Venture capital/spin-off funding	
<b>MAN</b>	Manufacturing agreement		<b>PPP</b>	Private-public partnership	
<b>MKT</b>	Marketing agreement/Franchising		<b>INFO</b>	Information exchange	√
<b>JV</b>	Joint venture		<b>CONS</b>	Available for consultancy	
<b>Other</b>	(please specify)				
<b>Details:</b>					

#### Quantified data

Items	Currently achieved quantity	Estimated future quantity
Economic impacts (in EURO)	0	0
number of licenses issued (within EU)	0	0
numberof licenses issued (outside EU)	0	0
Total value of licenses (in EURO)	0	0
number of entrepreneurial actions (start-up company, joint ventures...)	0	0

number of direct jobs created <sup>c</sup>	0	0
number of direct jobs safeguarded <sup>c</sup>	0	0
number of direct jobs lost	0	0

## Overview of Exploitation Plans

### RESULT TITLE / OWNER

Maze scenario (tool, learning material) / University of Duisburg-Essen

### COMMENT

Exploitation plan included in eTIP

I am the Co-ordinator of the above project, and confirm on behalf of the contracted Partners the information contained in this Technological Implementation Plan, and I authorise its public dissemination.

**Signature:**

**Name:**

**Date:**

**Organisation:**

close