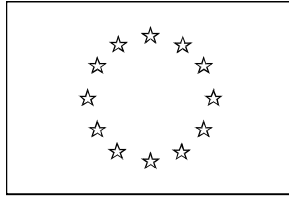


EUROPEAN COMMISSION



DIRECTORATE-GENERAL XXII - EDUCATION, TRAINING AND YOUTH

**LEONARDO DA VINCI
PROGRAMME**

**Pilot Project:
Remote Action in Distributed
Learning Environments (RADIO)**



FINAL REPORT

Vers. 09/08/2001

CONTRACT N°: D/99/2/07331/PI/II.1.1.a/FPI

PERIOD COVERED BY THE FINAL REPORT:

from 01/12/1999 to 31/07/2001.

Final report for pilot projects and survey and analysis projects

- *As stipulated in the contract, you are expected to complete this report form.*
- *The purpose of this report is to provide an overview of the results of the project - in terms of activities, developments, partnerships, etc. - as well as of the financial resources used to obtain the results. The **final report** is also the reference document for information about the development of projects. Data for the production of documents (compendia, catalogues, etc.) relating to your project will be taken from the information provided in this form.*

Please complete this report in one of the 11 official languages of the European Union (Danish, Dutch, English, Finnish, French, German, Greek, Italian, Portuguese, Spanish or Swedish), with the exception of the project summary, which must be in English, French or German.

For each project, two copies of all the products which have been developed and/or which are under development must be attached to the report (for IT products, please add the “user’s guide” relevant for each product.

I hereby declare the attached information to be correct and to have been approved by the authorities representing the partners who have collaborated on the activities presented in this report.

.....
(Original signature of the person legally responsible for the contracting organisation and the stamp of the contracting organisation)

Name: *Gerd-Rüdiger Kück*

Contracting Organisation: *Universität Bremen*

*Enrique-Schmidt-Strasse SFG (P.O. BOX 330440)
D – 28334 Bremen*

Position within the Contracting Organisation:

Chancellor

Made at: *Bremen*

Date:

To be returned to the following address :

European Commission
DG XXII.B/1 - LEONARDO DA VINCI Programme (CLEO)
Rue de la Loi 200 (JECL 7/34)
B-1049 Brussels

ACTIVITIES / RESULTS REPORT

I. PROJECT SUMMARY

PROJECT TITLE

Remote Action in Distributed Learning Environments (RADIO)

CONTRACTOR

Universität Bremen,
Enrique-Schmidt-Strasse SFG (P.O. BOX 330440)
D – 28334 Bremen
Coordinator: Dr. D. Müller, Prof. F.W. Bruns

- I.1. Please give a summary, in English, French or German, on the development of the project in terms of how the initial planned objectives have been met, the activities undertaken, the products completed, and also the specific activities undertaken regarding dissemination, transfer and commercialisation.

The *aim* of this pilot project is to develop, test and evaluate concepts for the deployment of remote action in distributed learning environments. In this context the possibility of sharing facilities in laboratories, teaching rooms and workshops of vocational schools at different locations by means of remote action systems will be investigated.

The project proceeds on the assumption that a jointly used resource - with respect to both, the objects and the staff - causes synergy effects which will improve the quality of vocational education. It is also postulated that the project will show perspectives that can be used to structure vocational education processes in distributed learning environments more effectively.

The central idea of the project is to offer the possibility of linking distributed learning systems via data networks, to integrate them into a virtual and real distributed learning environment. New approaches in telematic research linked to the tele-observation, remote control, remote installation and remote maintenance of real systems and machines will be taken into consideration. In this way students will be in a position to carry out practical exercises, experiments and learning tasks at machines and systems which are not available "on-the-spot". These tele-medial learning systems are to be supplemented by corresponding local systems using virtual reality and simulation techniques. The concept is to be exemplified by problems in the learning field of teleservice in *mechatronics*.

The *innovative content* of the project consists of combining different learning environments with telemedial teaching and learning material. Thus, telematics will be considered both as a delivery mechanism and also as the subject in vocational education. Telemedial learning environments and teaching systems will be applied in order to network virtual and real, teaching and learning media to make them available in different learning environments.

Teleservice will be the central point of the project. It comprises innovative working and organizational concepts that are combined with the telemedial support of maintenance and service management within the company (installation, maintenance and repair) as well as the operation of systems.

The development and use of teleservice is particularly significant especially relating to the new qualifications required for the work of mechatronic technicians. It makes new demands on both knowledge and capabilities.

II. PROJECT DESCRIPTION

This part of the final report is vital in providing us with a clear understanding of your pilot or survey and analysis project. To enable us to undertake a comprehensive analysis of your project, it is essential that you answer all the following questions.

II.1. Please describe the project's progress and achievements, giving a general assessment of the products/results achieved in relation to the specific initial objectives.

Initial objectives:

The aim of the RADIO project is to develop, test and evaluate concepts for the deployment of remote action in distributed learning environments. The possibility of sharing facilities in laboratories, teaching rooms and workshops of vocational schools at different locations by means of remote action systems will be investigated. The central idea of the project is to offer the possibility of linking distributed learning systems via data networks, to integrate them into a virtual data network and a real distributed learning environment.

New approaches in telematic research linked to the tele-observation, remote control, remote installation and remote maintenance of real systems and machines will be taken into consideration. In this way students will be in a position to carry out practical exercises, experiments and learning tasks at machines and systems which are not available "on-the-spot". The concept is to be exemplified by problems in the learning field of teleservice in mechatronics.

Products/results achieved in relation to those objectives:

1. Concepts for remote action oriented learning. Details can be found in the following deliverables (annex 1):
 - Teleservice in Industry (D21 Expertise - Technical Bases)
 - Training for Teleservice (D 22 Expertise - Pedagogical Bases)
 - Enabling Technologies for Tele-services (D23 Expertise - Tools and Methods)
2. Developed and evaluated learning modules. Details can be found in the following deliverables (annex 1):
 - Remote Diagnostic Interferometry (D31 Course Concept, D32 Documentation/ Evaluation of Course)
 - Use of Teleservice in embedded Systems (D 41 Course Concept, D42 Documentation/ Evaluation of Course).

II.2. With regard to the objective in the **Common Framework of Objectives** and the **Priority** chosen and indicated on the application form for your project, please state **specifically**: how your project has contributed to achieving the objectives and priority originally chosen.

A main point in RADIO consists in the realization and evaluation of teaching units to see how and whether our concept of remote action oriented learning meets the project objectives and priorities. Further details are found in *annex 1, work package 50/D51.*

II.3. Please describe the impact of your project in terms of systems and beneficiaries, as well as, where applicable, the impact of your project on: the acquisition of qualifications and skills; the establishment of training partnerships; the coherence with policies to help employment; the development of equal opportunities between men and women, etc.

The main impacts of RADIO are

- Vocational training in a very important future work profile (teleservice of network mechatronic systems and plants)
- Enrichment of training programmes by new telemedial learning subjects and methods.
- Enabling of life long learning by way of workplace and education institution coupling telesupport.

Further details are found in *annex 1, work package 20/D21-22*

II.4. Please state how the project has met the training, skills or qualification needs identified in your proposal.

Needs identified:

There are new training needs in the service field. In RADIO this was identified by literature research, participation at relevant conferences and workshops, as well as the exchange of detailed information with teleservice providers and customers. Further details are found in *annex 1, work package 20/D21*

How needs have been met:

Development of learning concepts and recommodations of learning modules and arrangements. Further details are found in *annex 1, work package 30/40*.

II.5. Please give details of the organisational and management structures used in the project.

Co-ordinator and contractor (*University of Bremen, artec*) : Artec supervised the work progress and was responsible for communication with the Commission and for the transfer of payments to the contractors. The project manager and co-ordinator organised internal project management including progress reports and organisation of meetings. Artec was also responsible for basic research and concept work in the field of teleservice techniques and training.

Partner 1 (*Stockport College*) and partner 2 (*Technisches Bildungszentrum Mitte (TBZ)*) were responsible for the development, documentation and testing of teaching material and for the realisation of teaching projects.

Partner 3 (*University of Cyprus, D.C.S*) was responsible for meta-concepts in the application field of enabling technologies for tele-service systems, distance learning, groupware and co-operative workspace.

II.6. Please give details of the activities, means and actions used to **disseminate** and **transfer** the results of your project to your partners, as well as to others in the training field outside your partnership, and also to others sectors.

The dissemination activities of the RADIO consortium are described in *annex 1, work package 50 / D51*

II.7. Please give the conclusions you have drawn from the **internal evaluation** procedures you have implemented.

The evaluation activities of the RADIO consortium are described in *annex 1, work package 50 / D50*

II.8. Please give a precise description of the **transnational cooperation** in your project and state whether this cooperation is to be continued in the future.

Beside the regular project work there was also a exchange of know-how and information material between the college. For cooperation support we use the group ware system BSCW.

It is planned to continue the cooperation in the future.

II.9. Please describe your project's Community added value and its innovative impact in terms of content, methodology, training products, surveys and analysis, etc.

In summary it can be said, that the concepts and methods, which were developed, tested and evaluated in RADIO shows possibilities how to train students and young workers in the very novel field of telemedia based service of mechatronic systems and plants. It therefore contributes to the improvement of initial vocational training in the sense of an early qualification for self-reliant, innovative management of technological and work-oriented changes.

II.10. Please describe the **problems** you have encountered (administrative, legal and practical obstacles, difficulties within the partnership, the completion of products and results, etc.) during the implementation of your project, and the specific **solutions** found.

At the beginning of RADIO there have been some organisational problems because the official project acceptance reached us very late in December 1999 (after the formal project start). Therefore time for preliminary work was too short. Nevertheless the consortium managed to start with the project work early in 2000. At the end of the project another problem occurred: the project manager got ill and we had to ask for a prolongation. We were pleased that the Commission accepted the prolongation and we could complete all our work packages and deliverables. One important reason for this was also the good cooperation and uncomplicated communication between the project partners. It is to say that this project has built real partnerships.

III. PROJECT RESULTS

This section is intended to give an overview of project results and products developed over the contract period.

III.1 GENERAL DESCRIPTION OF PRODUCTS/RESULTS DEVELOPED DURING THE CONTRACT PERIOD

	Name of training product/result/ publication	Completed yes/no	Description				
			Type of product ¹	Type of material ²	Language(s) ³	Pages and/or duration ⁴	Target audience ⁵
1	Teleservice in Industry D21 Expertise - Technical Bases	yes	description of new occupational profiles	printed, electronic material	EN, DE	23	F, E, DRH, DIR, RF, SF, DP
2	Training for Teleservice D 22 Expertise - Pedagogical Bases	yes	training programmes/ curricula	printed, electronic material	EN, DE	28	F, E, DRH, DIR, RF, SF, DP
3	Enabling Technologies for Tele-services D23 Expertise - Tools and Methods	yes	information/ resource databases guide for learning tools and methods	printed, electronic material	EN	25	F, E, DRH, DIR, RF, SF, DP
4	Remote Diagnostic Interferometry D31 Course Concept	yes	training modules, open and distance learning material	printed, electronic material	EN	28	JI, JT, F, E
5	Remote Diagnostic Interferometry D32 Documentation/ Evaluation of Course	yes	training modules concept for 'good practise'	printed, electronic material	EN	9	JI, JT, F, E
6	Use of Teleservice in embedded Systems D 41 Course Concept	yes	training modules, open and distance learning material	printed, electronic material	EN, DE	28	JI, JT, F, E
7	Use of Teleservice in embedded Systems D42 Documentation/ Evaluation of Course	yes	training modules concept for 'good practise'	printed, electronic material	EN, DE	26	JI, JT, F, E

¹ Cf. "III.2.1 Product type".

² Cf. "III.2.3. Type of Material and Electronic/computer materials (details)".

³ Please use the following codes: **DA** (Danish), **DE** (German), **EL** (Greek), **EN** (English), **ES** (Spanish), **FR** (French), **IT** (Italian), **NL** (Dutch), **PT** (Portuguese), **FI** (Finnish) and **SV** (Swedish).

⁴ Approximate duration of training in hours/number of pages of training materials.

⁵ Give the codes of the direct and/or indirect beneficiaries of the result/product (see "beneficiary type codes" attached).

III.2. DETAILED DESCRIPTION OF RESULTS/PRODUCTS

Please complete parts III.2.1. to III.2.8. using one form for **each group of results/products** developed as part of the project.

Product n°: 1	Completed: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Language(s) ⁶ : EN, DE
Name: Teleservice in Industry D21 Expertise - Technical Bases		
Target audience or beneficiaries ⁷ : F, E, DRH, DIR, RF, SF, DP		Number of pages or duration ⁸ : 23

Please identify the products / results developed during the period covered by this report:

III.2.1. Product type <ul style="list-style-type: none"> <input type="checkbox"/> training programmes/curricula <input type="checkbox"/> short courses <input type="checkbox"/> training modules <input type="checkbox"/> training networks and consortia <input type="checkbox"/> methodologies for analysing training needs <input type="checkbox"/> methodologies for forecasting training needs <input type="checkbox"/> evaluation tools <input type="checkbox"/> certification frameworks / tools and/or validation of skills <input type="checkbox"/> information/resource databases <input type="checkbox"/> glossaries <input type="checkbox"/> systems for language audits <input checked="" type="checkbox"/> description of new occupational profiles <input type="checkbox"/> open and distance learning material <input type="checkbox"/> others (specify):
--

III.2.2. Type of training method <ul style="list-style-type: none"> <input type="checkbox"/> group training with tutor <input checked="" type="checkbox"/> distance training <input checked="" type="checkbox"/> semi-autonomous/flexible training (with periodical tutoring) <input checked="" type="checkbox"/> autonomous training <input checked="" type="checkbox"/> others (specify): remote action oriented learning

⁶ Please use the following codes: **DA** (Danish), **DE** (German), **EL** (Greek), **EN** (English), **ES** (Spanish), **FR** (French), **IT** (Italian), **NL** (Dutch), **PT** (Portuguese), **FI** (Finnish) and **SV** (Swedish).

⁷ Give the codes for the direct and/or indirect beneficiaries (see "Beneficiary type codes" attached).

⁸ Approximate duration in hours/number of pages.

III.2.3. Material type

- printed (books, manuals, guides)
- audio cassettes
- video cassettes
- electronic materials (see below)
- others (specify):

ELECTRONIC/COMPUTER MATERIALS (details):

Platforms

- PC or compatible
- Apple Macintosh
- others (specify):

Storage media

- floppy/diskette
- CD-ROM
- CD-I
- laser/video disk
- others (specify):

Software

- database
- authoring tool/system
- multimedia
- simulation
- hypertext
- others (specify): Teleservice-Tools

Communication media

Telematic network

- Internet
 - packet switched network
 - telephone switched network
 - others (specify):

- satellite

x ISDN

Application

- data transfer
- video conferencing
- groupware
- others (specify):

III.2.4 Developed in cooperation with the following Partners (please give the names of the organisations involved):

University of Bremen, artec, Germany(D)

II.2.5. Availability

- available from Promoters for consultation
- to be commercialised
- distributed free of charge
- available on the Internet
- others

III.2.6. Brief description of results/products

Please describe: (1) what needs the product meets, (2) the objectives, (3) content, areas covered and teaching principles applied, (4) target audience and training/skills level, (5) equipment required and conditions for use, and (6) future developments planned.

Product 1:

(1) needs met by the product:

Survey of new service concepts provided by the mechanical engineering and plant construction industries
Description of new occupational profiles in telemedia based service

(2) objectives:

Provide a practical guide to issues regarding teleservice work organisation and techniques.
Recommendation for designing appropriate vocational training concepts and suitable learning environments.

(3) content, areas covered and teaching principles applied:

Distributed installation, operation, maintenance and repair of networked mechatronic plant and machinery.
Remote action oriented learning

(4) target audience and training/skills level:

F, E, DRH, DIR, RF, SF, DP

(5) equipment required and conditions for use:

No restriction

(6) future developments planned:

Conceptual bases for future research and development

III.2.7. Where the product has been **validated/certified**, please give the **name** and **country** of the relevant organisations and a description of the validation methodologies adopted.

Stockport College (UK),
Technisches Bildungszentrum Mitte (TBZ) (D),
University of Cyprus, DCS (CY)

Product n°: 2	Completed: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Language(s) ⁹ : EN, DE
Name: Training for Teleservice D 22 Expertise - Pedagogical Bases		
Target audience or beneficiaries ¹⁰ : F, E, DRH, DIR, RF, SF, DP		Number of pages or duration ¹¹ : 28

Please identify the products / results developed during the period covered by this report:

III.2.1. Product type <input checked="" type="checkbox"/> training programmes/curricula <input type="checkbox"/> short courses <input type="checkbox"/> training modules <input type="checkbox"/> training networks and consortia <input type="checkbox"/> methodologies for analysing training needs <input type="checkbox"/> methodologies for forecasting training needs <input type="checkbox"/> evaluation tools <input type="checkbox"/> certification frameworks / tools and/or validation of skills <input type="checkbox"/> information/resource databases <input type="checkbox"/> glossaries <input type="checkbox"/> systems for language audits <input type="checkbox"/> description of new occupational profiles <input type="checkbox"/> open and distance learning material <input type="checkbox"/> others (specify):

III.2.2. Type of training method <input type="checkbox"/> group training with tutor <input checked="" type="checkbox"/> distance training <input checked="" type="checkbox"/> semi-autonomous/flexible training (with periodical tutoring) <input checked="" type="checkbox"/> autonomous training <input checked="" type="checkbox"/> others (specify): remote action oriented learning
--

⁹ Please use the following codes: **DA** (Danish), **DE** (German), **EL** (Greek), **EN** (English), **ES** (Spanish), **FR** (French), **IT** (Italian), **NL** (Dutch), **PT** (Portuguese), **FI** (Finnish) and **SV** (Swedish).

¹⁰ Give the codes for the direct and/or indirect beneficiaries (see "Beneficiary type codes" attached).

¹¹ Approximate duration in hours/number of pages.

III.2.3. Material type

- printed (books, manuals, guides)
- audio cassettes
- video cassettes
- electronic materials (see below)
- others (specify):

ELECTRONIC/COMPUTER MATERIALS (details):

Platforms

- PC or compatible
- Apple Macintosh
- others (specify):

Storage media

- floppy/diskette
- CD-ROM
- CD-I
- laser/video disk
- others (specify):

Software

- database
- authoring tool/system
- multimedia
- simulation
- hypertext
- others (specify): Teleservice-Tools

Communication media

Telematic network

- Internet
 - packet switched network
 - telephone switched network
 - others (specify):

- satellite

x ISDN

Application

- data transfer
- video conferencing
- groupware
- others (specify):

III.2.4 Developed in cooperation with the following Partners (please give the names of the organisations involved):

University of Bremen, artec, Germany(D)

II.2.5. Availability

- available from Promoters for consultation
- to be commercialised
- distributed free of charge
- available on the Internet
- others

III.2.6. Brief description of results/products

Please describe: (1) what needs the product meets, (2) the objectives, (3) content, areas covered and teaching principles applied, (4) target audience and training/skills level, (5) equipment required and conditions for use, and (6) future developments planned.

Product 2:

(1) needs met by the product:

Needs of new concepts in training for teleservice

(2) objectives:

Develop new vocational training concepts for teleservice on the basis of telemedia-aided learning ('Remote Action')

(3) content, areas covered and teaching principles applied:

Basic pedagogical concepts and training requirements for teaching teleservice

(4) target audience and training/skills level:

F, E, DRH, DIR, RF, SF, DP

(5) equipment required and conditions for use:

no restriction

(6) future developments planned:

Conceptual bases for future research and development

III.2.7. Where the product has been **validated/certified**, please give the **name** and **country** of the relevant organisations and a description of the validation methodologies adopted.

Stockport College (UK)
Technisches Bildungszentrum Mitte (TBZ) (D)
University of Cyprus, DCS (CY)

Product n°: 3	Completed: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Language(s) ¹² : EN, DE
Name: Enabling Technologies for Tele-services D23 Expertise - Tools and Methods		
Target audience or beneficiaries ¹³ : F, E, DRH, DIR, RF, SF, DP		Number of pages or duration ¹⁴ : 25

Please identify the products / results developed during the period covered by this report:

III.2.1. Product type <ul style="list-style-type: none"> <input type="checkbox"/> training programmes/curricula <input type="checkbox"/> short courses <input type="checkbox"/> training modules <input type="checkbox"/> training networks and consortia <input type="checkbox"/> methodologies for analysing training needs <input type="checkbox"/> methodologies for forecasting training needs <input type="checkbox"/> evaluation tools <input type="checkbox"/> certification frameworks / tools and/or validation of skills <input checked="" type="checkbox"/> information/resource databases <input type="checkbox"/> glossaries <input type="checkbox"/> systems for language audits <input type="checkbox"/> description of new occupational profiles <input type="checkbox"/> open and distance learning material <input checked="" type="checkbox"/> others (specify): learning tools and methods
--

III.2.2. Type of training method <ul style="list-style-type: none"> <input type="checkbox"/> group training with tutor <input checked="" type="checkbox"/> distance training <input checked="" type="checkbox"/> semi-autonomous/flexible training (with periodical tutoring) <input checked="" type="checkbox"/> autonomous training <input checked="" type="checkbox"/> others (specify): remote action oriented learning

¹² Please use the following codes: **DA** (Danish), **DE** (German), **EL** (Greek), **EN** (English), **ES** (Spanish), **FR** (French), **IT** (Italian), **NL** (Dutch), **PT** (Portuguese), **FI** (Finnish) and **SV** (Swedish).

¹³ Give the codes for the direct and/or indirect beneficiaries (see "Beneficiary type codes" attached).

¹⁴ Approximate duration in hours/number of pages.

III.2.3. Material type

- printed (books, manuals, guides)
- audio cassettes
- video cassettes
- electronic materials (see below)
- others (specify):

ELECTRONIC/COMPUTER MATERIALS (details):

Platforms

- PC or compatible
- Apple Macintosh
- others (specify):

Storage media

- floppy/diskette
- CD-ROM
- CD-I
- laser/video disk
- others (specify):

Software

- database
- authoring tool/system
- multimedia
- simulation
- hypertext
- others (specify): Teleservice-Tools

Communication media

Telematic network

- Internet
 - packet switched network
 - telephone switched network
 - others (specify):

- satellite

- ISDN

Application

- data transfer
- video conferencing
- groupware
- others (specify):

III.2.4 Developed in cooperation with the following Partners (please give the names of the organisations involved):

University of Cyprus, DCS (CY)

II.2.5. Availability

- available from Promoters for consultation
- to be commercialised
- distributed free of charge
- available on the Internet
- others

III.2.6. Brief description of results/products

Please describe: (1) what needs the product meets, (2) the objectives, (3) content, areas covered and teaching principles applied, (4) target audience and training/skills level, (5) equipment required and conditions for use, and (6) future developments planned.

Product 3:

(1) needs met by the product:

Needs of novel tools and methods in training for teleservice

(2) objectives:

State-of-the-art survey on the available novel technologies and methods for developing tele-service systems

(3) content, areas covered and teaching principles applied:

Groupware, Computer Supported Collaborative Work (CSCW), cooperative distributed information systems, design and development of distance learning concepts.

(4) target audience and training/skills level:

F, E, DRH, DIR, RF, SF, DP

(5) equipment required and conditions for use:

no restriction

(6) future developments planned:

Conceptual bases for future research and development

III.2.7. Where the product has been **validated/certified**, please give the **name** and **country** of the relevant organisations and a description of the validation methodologies adopted.

Universität Bremen, artec (D)
Stockport College (UK)
Technisches Bildungszentrum Mitte (TBZ) (D)

Product n°: 4	Completed: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Language(s) ¹⁵ : EN, DE
Name: Remote Diagnostic Interferometry D31 Course Concept		
Target audience or beneficiaries ¹⁶ : F, E, DRH, DIR, RF, SF, DP		Number of pages or duration ¹⁷ : 28

Please identify the products / results developed during the period covered by this report:

III.2.1. Product type <ul style="list-style-type: none"> <input type="checkbox"/> training programmes/curricula <input type="checkbox"/> short courses <input checked="" type="checkbox"/> training modules <input type="checkbox"/> training networks and consortia <input type="checkbox"/> methodologies for analysing training needs <input type="checkbox"/> methodologies for forecasting training needs <input type="checkbox"/> evaluation tools <input type="checkbox"/> certification frameworks / tools and/or validation of skills <input type="checkbox"/> information/resource databases <input type="checkbox"/> glossaries <input type="checkbox"/> systems for language audits <input type="checkbox"/> description of new occupational profiles <input checked="" type="checkbox"/> open and distance learning material <input type="checkbox"/> others (specify)
--

III.2.2. Type of training method <ul style="list-style-type: none"> <input type="checkbox"/> group training with tutor <input checked="" type="checkbox"/> distance training <input checked="" type="checkbox"/> semi-autonomous/flexible training (with periodical tutoring) <input checked="" type="checkbox"/> autonomous training <input checked="" type="checkbox"/> others (specify): remote action oriented learning

¹⁵ Please use the following codes: **DA** (Danish), **DE** (German), **EL** (Greek), **EN** (English), **ES** (Spanish), **FR** (French), **IT** (Italian), **NL** (Dutch), **PT** (Portuguese), **FI** (Finnish) and **SV** (Swedish).

¹⁶ Give the codes for the direct and/or indirect beneficiaries (see "Beneficiary type codes" attached).

¹⁷ Approximate duration in hours/number of pages.

III.2.3. Material type

- printed (books, manuals, guides)
- audio cassettes
- video cassettes
- electronic materials (see below)
- others (specify): real and remote virtual laboratory

ELECTRONIC/COMPUTER MATERIALS (details):

Platforms

- PC or compatible
- Apple Macintosh
- others (specify):

Storage media

- floppy/diskette
- CD-ROM
- CD-I
- laser/video disk
- others (specify):

Software

- database
- authoring tool/system
- multimedia
- simulation
- hypertext
- others (specify): Teleservice-Tools

Communication media

Telematic network

- Internet
 - packet switched network
 - telephone switched network
 - others (specify):

- satellite

- ISDN

Application

- data transfer
- video conferencing
- groupware
- others (specify):

III.2.4 Developed in cooperation with the following Partners (please give the names of the organisations involved):

Technisches Bildungszentrum Mitte (TBZ), Germany(D)

II.2.5. Availability

- available from Promoters for consultation
- to be commercialised
- distributed free of charge
- available on the Internet
- others

III.2.6. Brief description of results/products

Please describe: (1) what needs the product meets, (2) the objectives, (3) content, areas covered and teaching principles applied, (4) target audience and training/skills level, (5) equipment required and conditions for use, and (6) future developments planned.

Product 4:

(1) needs met by the product:

Lack of teaching examples and experiences in teaching teleservice

(2) objectives:

Development of teaching modules for remote action oriented physical experiments

(3) content, areas covered and teaching principles applied:

Remote Diagnostic Interferometry

(4) target audience and training/skills level:

F, E, DRH, DIR, RF, SF, DP

(5) equipment required and conditions for use:

special lab equipment, see Annex 1, Work package 30/D31

(6) future developments planned:

Bases for future training courses and curricula

(Add additional boxes to continue the list of products if necessary.)

III.2.7. Where the product has been **validated/certified**, please give the **name** and **country** of the relevant organisations and a description of the validation methodologies adopted.

Stockport College (UK)
Universität Bremen, artec (D)

Product n°: 5	Completed: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Language(s) ¹⁸ : EN, DE
Name: Remote Diagnostic Interferometry D32 Documentation/ Evaluation of Course		
Target audience or beneficiaries ¹⁹ : F, E, DRH, DIR, RF, SF, DP		Number of pages or duration ²⁰ : 22

Please identify the products / results developed during the period covered by this report:

III.2.1. Product type <ul style="list-style-type: none"> <input type="checkbox"/> training programmes/curricula <input type="checkbox"/> short courses <input checked="" type="checkbox"/> training modules <input type="checkbox"/> training networks and consortia <input type="checkbox"/> methodologies for analysing training needs <input type="checkbox"/> methodologies for forecasting training needs <input type="checkbox"/> evaluation tools <input type="checkbox"/> certification frameworks / tools and/or validation of skills <input type="checkbox"/> information/resource databases <input type="checkbox"/> glossaries <input type="checkbox"/> systems for language audits <input type="checkbox"/> description of new occupational profiles <input type="checkbox"/> open and distance learning material <input checked="" type="checkbox"/> others (specify): concept of 'good practise'
--

III.2.2. Type of training method <ul style="list-style-type: none"> <input type="checkbox"/> group training with tutor <input checked="" type="checkbox"/> distance training <input checked="" type="checkbox"/> semi-autonomous/flexible training (with periodical tutoring) <input checked="" type="checkbox"/> autonomous training <input checked="" type="checkbox"/> others (specify): remote action oriented learning

¹⁸ Please use the following codes: **DA** (Danish), **DE** (German), **EL** (Greek), **EN** (English), **ES** (Spanish), **FR** (French), **IT** (Italian), **NL** (Dutch), **PT** (Portuguese), **FI** (Finnish) and **SV** (Swedish).

¹⁹ Give the codes for the direct and/or indirect beneficiaries (see "Beneficiary type codes" attached).

²⁰ Approximate duration in hours/number of pages.

III.2.3. Material type

- printed (books, manuals, guides)
- audio cassettes
- video cassettes
- electronic materials (see below)
- others (specify): real and remote virtual laboratory

ELECTRONIC/COMPUTER MATERIALS (details):

Platforms

- PC or compatible
- Apple Macintosh
- others (specify):

Storage media

- floppy/diskette
- CD-ROM
- CD-I
- laser/video disk
- others (specify):

Software

- database
- authoring tool/system
- multimedia
- simulation
- hypertext
- others (specify): Teleservice-Tools

Communication media

Telematic network

- Internet
 - packet switched network
 - telephone switched network
 - others (specify):

- satellite

- ISDN

Application

- data transfer
- video conferencing
- groupware
- others (specify):

III.2.4 Developed in cooperation with the following Partners (please give the names of the organisations involved):

Technisches Bildungszentrum Mitte (TBZ), Germany(D)

II.2.5. Availability

- available from Promoters for consultation
- to be commercialised
- distributed free of charge
- available on the Internet
- others

III.2.6. Brief description of results/products

Please describe: (1) what needs the product meets, (2) the objectives, (3) content, areas covered and teaching principles applied, (4) target audience and training/skills level, (5) equipment required and conditions for use, and (6) future developments planned.

Product 5:

(1) needs met by the product:

Good practise in teaching teleservice

(2) objectives:

Recommendation for learning arrangements based on teaching experiences in practise

(3) content, areas covered and teaching principles applied:

Remote Diagnostic Interferometry

(4) target audience and training/skills level:

F, E, DRH, DIR, RF, SF, DP

(5) equipment required and conditions for use:

Special lab equipment, see Annex 1, Work package 30/D31

(6) future developments planned:

Bases for future training courses and curricula

III.2.7. Where the product has been **validated/certified**, please give the **name** and **country** of the relevant organisations and a description of the validation methodologies adopted.

Stockport College (UK), United Kingdom (UK)
University of Bremen, Germany(D)

Product n°: 6	Completed: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Language(s) ²¹ : EN, DE
Name: Use of Teleservice in embedded Systems D 41 Course Concept		
Target audience or beneficiaries ²² : F, E, DRH, DIR, RF, SF, DP		Number of pages or duration ²³ : 28

Please identify the products / results developed during the period covered by this report:

III.2.1. Product type <ul style="list-style-type: none"> <input type="checkbox"/> training programmes/curricula <input type="checkbox"/> short courses <input checked="" type="checkbox"/> training modules <input type="checkbox"/> training networks and consortia <input type="checkbox"/> methodologies for analysing training needs <input type="checkbox"/> methodologies for forecasting training needs <input type="checkbox"/> evaluation tools <input type="checkbox"/> certification frameworks / tools and/or validation of skills <input type="checkbox"/> information/resource databases <input type="checkbox"/> glossaries <input type="checkbox"/> systems for language audits <input type="checkbox"/> description of new occupational profiles <input checked="" type="checkbox"/> open and distance learning material <input type="checkbox"/> others (specify):

III.2.2. Type of training method <ul style="list-style-type: none"> <input type="checkbox"/> group training with tutor <input checked="" type="checkbox"/> distance training <input checked="" type="checkbox"/> semi-autonomous/flexible training (with periodical tutoring) <input checked="" type="checkbox"/> autonomous training <input checked="" type="checkbox"/> others (specify): remote action oriented learning

²¹ Please use the following codes: **DA** (Danish), **DE** (German), **EL** (Greek), **EN** (English), **ES** (Spanish), **FR** (French), **IT** (Italian), **NL** (Dutch), **PT** (Portuguese), **FI** (Finnish) and **SV** (Swedish).

²² Give the codes for the direct and/or indirect beneficiaries (see "Beneficiary type codes" attached).

²³ Approximate duration in hours/number of pages.

III.2.3. Material type

- printed (books, manuals, guides)
- audio cassettes
- video cassettes
- electronic materials (see below)
- others (specify):

ELECTRONIC/COMPUTER MATERIALS (details):

Platforms

- PC or compatible
- Apple Macintosh
- others (specify):

Storage media

- floppy/diskette
- CD-ROM
- CD-I
- laser/video disk
- others (specify):

Software

- database
- authoring tool/system
- multimedia
- simulation
- hypertext
- others (specify): Teleservice-Tools

Communication media

Telematic network

- Internet
 - packet switched network
 - telephone switched network
 - others (specify):

- satellite

- ISDN

Application

- data transfer
- video conferencing
- groupware
- others (specify):

III.2.4 Developed in cooperation with the following Partners (please give the names of the organisations involved):

Stockport College (UK), United Kingdom (UK)

II.2.5. Availability

- available from Promoters for consultation
- to be commercialised
- distributed free of charge
- available on the Internet
- others

III.2.6. Brief description of results/products

Please describe: (1) what needs the product meets, (2) the objectives, (3) content, areas covered and teaching principles applied, (4) target audience and training/skills level, (5) equipment required and conditions for use, and (6) future developments planned.

Product 6:

(1) needs met by the product:

Lack of teaching examples and experiences in teaching teleservice

(2) objectives:

Development of teaching modules for remote action oriented learning

(3) content, areas covered and teaching principles applied:

Use of Teleservice in embedded Systems

(4) target audience and training/skills level:

F, E, DRH, DIR, RF, SF, DP

(5) equipment required and conditions for use:

special lab equipment, see Annex 1, Work package 40/D41

(6) future developments planned:

Bases for future training courses and curricula

(Add additional boxes to continue the list of products if necessary.)

III.2.7. Where the product has been **validated/certified**, please give the **name** and **country** of the relevant organisations and a description of the validation methodologies adopted.

University of Bremen, Germany(D)

Technisches Bildungszentrum Mitte (TBZ), Germany(D)

Product n°: 7	Completed: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Language(s) ²⁴ : EN, DE
Name: Use of Teleservice in embedded Systems D42 Documentation/ Evaluation of Course		
Target audience or beneficiaries ²⁵ : F, E, DRH, DIR, RF, SF, DP		Number of pages or duration ²⁶ : 28

Please identify the products / results developed during the period covered by this report:

III.2.1. Product type <ul style="list-style-type: none"> <input type="checkbox"/> training programmes/curricula <input type="checkbox"/> short courses <input checked="" type="checkbox"/> training modules <input type="checkbox"/> training networks and consortia <input type="checkbox"/> methodologies for analysing training needs <input type="checkbox"/> methodologies for forecasting training needs <input type="checkbox"/> evaluation tools <input type="checkbox"/> certification frameworks / tools and/or validation of skills <input type="checkbox"/> information/resource databases <input type="checkbox"/> glossaries <input type="checkbox"/> systems for language audits <input type="checkbox"/> description of new occupational profiles <input type="checkbox"/> open and distance learning material <input checked="" type="checkbox"/> others (specify): concept of 'good practise'
--

III.2.2. Type of training method <ul style="list-style-type: none"> <input type="checkbox"/> group training with tutor <input checked="" type="checkbox"/> distance training <input checked="" type="checkbox"/> semi-autonomous/flexible training (with periodical tutoring) <input checked="" type="checkbox"/> autonomous training <input checked="" type="checkbox"/> others (specify): remote action oriented learning

²⁴ Please use the following codes: **DA** (Danish), **DE** (German), **EL** (Greek), **EN** (English), **ES** (Spanish), **FR** (French), **IT** (Italian), **NL** (Dutch), **PT** (Portuguese), **FI** (Finnish) and **SV** (Swedish).

²⁵ Give the codes for the direct and/or indirect beneficiaries (see "Beneficiary type codes" attached).

²⁶ Approximate duration in hours/number of pages.

III.2.3. Material type

- printed (books, manuals, guides)
- audio cassettes
- video cassettes
- electronic materials (see below)
- others (specify):

ELECTRONIC/COMPUTER MATERIALS (details):

Platforms

- PC or compatible
- Apple Macintosh
- others (specify):

Storage media

- floppy/diskette
- CD-ROM
- CD-I
- laser/video disk
- others (specify):

Software

- database
- authoring tool/system
- multimedia
- simulation
- hypertext
- others (specify): Teleservice-Tools

Communication media

Telematic network

- Internet
 - packet switched network
 - telephone switched network
 - others (specify):
 - satellite
 - ISDN
- ###### Application
- data transfer
 - video conferencing
 - groupware
 - others (specify):

III.2.4 Developed in cooperation with the following Partners (please give the names of the organisations involved):

Stockport College (UK), United Kingdom (UK)

II.2.5. Availability

- available from Promoters for consultation
- to be commercialised
- distributed free of charge
- available on the Internet
- others

III.2.6. Brief description of results/products

Please describe: (1) what needs the product meets, (2) the objectives, (3) content, areas covered and teaching principles applied, (4) target audience and training/skills level, (5) equipment required and conditions for use, and (6) future developments planned.

Product 7:

(1) needs met by the product:

Good practise in teaching teleservice

(2) objectives:

Recommendation for learning arrangements based on teaching experiences in practise

(3) content, areas covered and teaching principles applied:

Use of Teleservice in embedded Systems

(4) target audience and training/skills level:

F, E, DRH, DIR, RF, SF, DP

(5) equipment required and conditions for use:

Special lab equipment, see Annex 1, Work package 40/D41

(6) future developments planned:

Bases for future training courses and curricula

(Add additional boxes to continue the list of products if necessary.)

III.2.7. Where the product has been **validated/certified**, please give the **name** and **country** of the relevant organisations and a description of the validation methodologies adopted.

Technisches Bildungszentrum Mitte (TBZ), Germany(D)
University of Bremen, Germany(D)

III.2.8. Measure III.1.a (foreign language training) only

If yours was a measure III.1.a. (foreign language training) project, please also complete the following table for **each language result/product** developed.

Any reference to learners' languages, levels of learning and skills developed should be cross-linked to the target language. For example, materials developed for training Spanish speakers in spoken Danish at beginner's level should be indicated as shown below.

-- / --

Learners' languages		Target languages														
		ES	DA	DE	GR	EN	FR	GA	IT	NL	PT	LE	FI	SV	NO	IS
Spanish	ES															
Danish	DA															
German	DE															
Greek	GR															
English	EN															
French	FR															
Irish	GA															
Italian	IT															
Dutch	NL															
Portuguese	PT															
Letzebuerg.	LE															
Finnish	FI															
Swedish	SV															
Norwegian	NO															
Icelandic	IS															
Not relevant	Any															

Levels		ES	DA	DE	GR	EN	FR	GA	IT	NL	PT	LE	FI	SV	NO	IS
	Beginner															
	Intermediate															
	Advanced															

Skills		ES	DA	DE	GR	EN	FR	GA	IT	NL	PT	LE	FI	SV	NO	IS
	Speak															
	Listen															
	Read															
	Write															

**III.3. ONLY TO BE COMPLETED BY SURVEY AND ANALYSIS PROJECTS (MEASURE III.2.A):
DESCRIPTION OF RESEARCH PRINCIPLES AND METHODOLOGY**

-- / --

Please give a brief description on each of the following points for the period in question:

- contextual analysis and theoretical model
 - working hypotheses
 - research aims and content
 - survey instruments
 - analytical methods (interview, questionnaire, observation, content analysis, etc.)
 - data utilisation (statistical instruments, interpretation, conclusions, etc.). Breakdown of statistical data by gender, country, organisation type, etc.
 - publications produced (please specify)
-

III.4. MEASURE II.1.1.C. ONLY: INTENSIVE TRANSNATIONAL SHORT COURSES

N°	Title of course developed	Country ²⁷	Host town	Course dates		Duration in hours	Course participants		Participants by organisation type				
				Start (d/m/y) ²⁸	End (d/m/y)		Number Men/Women	non-host countries	SME	Industries	Universities	Other organisations	
1	-- / --												
2													
3													
4													
5													
6													
7													
8													
9													
TOTAL													

(Add an extra sheet if necessary.)

²⁷ Please give the code for the country where the course was held (see "country codes" attached).

²⁸ Please give dates as follows: d/m/y (d: day, m: month, y: year), e.g. 21/12/95.

III.5. MEASURE II.1.1.C. ONLY: TRAINING NETWORKS

-- / --

The training network set up under measure II.1.1.c. (tick as appropriate):

- is a regional network
- is a thematic/sectoral network

Region(s) or sector/theme

-- / --

- actively** involves **Partners** from Objective 1 and/or 6 regions

Regions:

Please give a brief description of how the network operates and the type of active participation from Partners in the various European regions, in particular those from Objective 1 and/or 6 regions.

-- / --

Please describe the **results obtained** by the network in terms of identifying skills needs, developing content, tools and technology transfer, and applying the results of research and development programmes.

-- / --

III.6. MEASURE III.3.A. ONLY: MULTIPLIER-EFFECT PROJECTS

Please describe the **transnational multiplier plan** implemented, the nature (translation into other languages, adaptation, dissemination, etc.) of your project's real multiplier **impact** on systems and arrangements in the participating countries, and drawbacks encountered during project implementation.

-- / --

IV. SCHEDULE OF COMPLETED ACTIVITIES

Detailed list of activities implemented over the contract period, by **type**

I. Regular work programme activities

	Date		Description of activity	Objective(s) and/or result(s) achieved	Partners involved (country and name)
	from (d/m/y) ²⁹	to (d/m/y)			
1	01/12/99	15/01/00	I. Preliminaries	Constitution of the project teams, planning of detailed work programme and milestones	Universität Bremen, artec (D) Stockport College (UK) Technisches Bildungszentrum Mitte (TBZ) (D) University of Cyprus, DCS (CY)
2	16/01/00	31/06/00	II. Planning and basic research	Information retrieval, Outlining of application scenarios, Planning of learning arrangements	- " -
3	01/07/00	30/09/00	III. Implementation	Concept work and basic research, Development of teaching material, Installation of learning environments	- " -
4	01/10/00	31/12/00	IV. Test	Realisation of teaching projects	- " -
5	01/01/01	31/03/01	V. Evaluation	Documentation and evaluation of teaching projects, revision of the materials used, summary of results	- " -
6	01/04/01	31/07/01	VI. Dissemination	Development of recommendations, dissemination activities, realisation of final meeting	- " -

II. Project meetings with partners and other activities (dissemination etc.)

	Date		Description of activity	Objective(s) and/or result(s) achieved	Partners involved (country and name)
	from (d/m/y)	to (d/m/y)			
1	24/01/00	25/01/00	Information meeting at the Leonardo National Coordination Unit in Bonn (BIBB)	Information about Leonardo programme and project structures	Universität Bremen, artec (D)

²⁹ Please give dates as follows: d/m/y (d: day, m: month, y: year), e.g. 21/12/95.

2	27/03/00	28/03/00	Kick-Off Meeting with partners in Nicosia-Cyprus	Project Meeting <ul style="list-style-type: none"> • Management Issues: Budget plan, Contract preparation • Short- and long-term aims: Assignment of tasks for each partner, Work packages, Milestones • Installation of the project infrastructure 	Universität Bremen, artec (D) Stockport College (UK) Technisches Bildungszentrum Mitte (TBZ) (D) University of Cyprus, DCS (CY)
3	09/07/00	11/07/00	Seminar "Teleservice" in Erfurt	Dissemination activities	Universität Bremen, artec (D) Technisches Bildungszentrum Mitte (TBZ) (D)
4	19/10/00	20/10/00	Project Meeting with partners in Stockport	Project Meeting <ul style="list-style-type: none"> • Management report • Progress report (every partner) • Discussion of the Work packages: theoretical concepts, teaching units, evaluation 	Universität Bremen, artec (D) Stockport College (UK) Technisches Bildungszentrum Mitte (TBZ) (D) University of Cyprus, DCS (CY)
5	09/01/01	10/01/01	European Education and Concertation Meeting in Luxembourg	Dissemination activities	Universität Bremen, artec (D)
5	27/03/01	27/03/01	Visit of CEBIT (fair)	Information about teleservice learning aids and media	Technisches Bildungszentrum Mitte (TBZ) (D)
6	05/07/01	06/07/01	Final Project Meeting with partners in Bremen	Project Meeting <ul style="list-style-type: none"> • Management report • Progress report (every partner) • Preparation of final report: all Participants 	Universität Bremen, artec (D) Stockport College (UK) Technisches Bildungszentrum Mitte (TBZ) (D)

V. COMPLEMENTARITY/TRANSVERSALITY

Please give details of any projects developed under other Community programmes or initiatives which complement yours, **where applicable**.

(Only for projects which have a degree of complementarity/transversality - in terms of topic, content, contracts, etc. - with other Community projects, programmes or initiatives)

COMPLEMENTARITY with other Community initiatives and/or programmes

Programme or initiative	Project N°	Title	Nature of the link
European IST	IST-1999-10417	DERIVE	Know-how-exchange in the following research fields: Distributed Real and Virtual Learning Environment for Mechatronics, Mixed Realities

TRANSVERSALITY with other LEONARDO DA VINCI projects

Strand and measure	Full N°	Title	Nature of the link

Please describe the **added value** achieved by your project's complementarity/transversality, and any **difficulties** encountered in forging these ties.

Research results of DERIVE were used for the RADIO concept development (see Annex 1, Work package 20/D22).

VI. DISSEMINATION AND TRANSFER ACTIVITIES

In compliance with the Contract signed with the European Commission, the Partnership undertakes, by use of appropriate means, to take measures to disseminate the project results to as wide an audience as possible. The Partnership is also obliged to legally protect the products intended for dissemination in a suitable manner, and to ensure that all dissemination activities are undertaken legally. Point VI.2. of this report must be completed by all projects.

Should the Partnership wish to commercialise the project results/products, please complete part VI.3. of the report.

VI.1. Definitions

Dissemination: Dissemination is the activity of spreading information and must occur in all projects. This information should be about the process and products of the project. In other words, dissemination covers both information about the activities that took place in the project, the lessons that were learnt and the methodologies that were tested, and the results and outputs or products of the projects.

Commercialisation: Commercialisation is the process of bringing a product or service to the market for a price which is acceptable to the market and which is intended to provide a return on the original and on-going investment in the product.

VI.2. Dissemination activities

Please send us a copy of all documents/materials produced on the dissemination strategy. You are also requested to answer the following questions:

- To what extent does each Partner participate in the dissemination activities?

see Annex 1 Deliverable 51/ Work package 50

- Have copyrights, reproduction and dissemination rights been clarified within the Partnership by means of formal agreements? Please send us a copy of the agreements and provide an explanation of your strategy.

No copyrights, reproduction and dissemination rights on RADIO products

The agreements must include the following information:

- agreements on the ownership of project results (copyright and intellectual property right) signed by all the partners;
- agreement on the ownership of dissemination rights.
- the number of copies of the results
- the organisations which will hold the copies

- / -

- How have the products been transferred to other people or organisations, and what networks and structures have been used?

see Annex 1 Deliverable 51/ Work package 50

- What dissemination channels have been used?

see Annex 1 Deliverable 51/ Work package 50

Promotional materials (leaflets, brochures etc.)

How many have been printed, in what languages, which is the target for these and how many have been circulated to each target group?

see Annex 1 Deliverable 51/ Work package 50

Web sites, newsgroups

Have you a Web site? Do you know how many hits it has had? Do you have an Internet newsgroup? How many participants are there in this newsgroup?

- / -

Internet Address	http://www.radio.uni-bremen.de
------------------	---

Exhibitions

Have you demonstrated or tested your project/product at any exhibition? Where and when?

Workshop "Computer im Unterricht", Landesinstitut für Schule – Presentation of RADIO teaching scenarios. Landesinstitut für Schule. Bremen – 12.5.2001

Conferences

Have you or any of your Partners spoken at any conferences or seminars about your project? Where and when?

Müller, D./ Bruns, F.-W.: Telemedia-based Training Environments and Support Tools in Service and Maintenance. Summer school for technical teacher at the HRDI - Korea University of Technology & Education – August 2000

Müller, D.: Teleservice - Technical and Pedagogical Concepts. Talk on the 12. HGTB-Fachtagung – Vocation Training and Education. Bremen, 22.6-23.6.2000

Other

Have you undertaken any other dissemination activities?

For further information see Annex 1 Deliverable 51/ Work package 50

- Do you intend to widen the scope of your dissemination activities to organisations outside the actual partnership, other **organisations** or other countries?

Yes. Further dissemination activities are in preparation.

VI.3. Commercialisation activities

Where the Partnership wishes to commercialise, please note that your project contract stipulates that prior written permission from the European Commission must be obtained for commercialising all or part of the products or training activities produced with community financial assistance.

Information on the following questions must be provided:

- have copyrights, intellectual property rights and distribution rights been clarified within the partnership by means of formal agreements? Please send us a copy of these agreements and provide an explanation of your strategy on this subject.

- no -

The agreements must include the following information:

- agreements on the ownership of results (copyright and intellectual property rights) signed by all the partners,
 - agreements on the ownership of distribution rights,
 - the number of copies of the results,
 - the organisations which will hold the copies.
- Are you planning to commercialise all or part of the project results?

- no Commercialisation intended -

- Have you developed a commercialisation plan (market analysis, distribution channels, price structures ...) in agreement with your partners? Please send us this plan, together with the products you intend to commercialise and all related documentation on this subject.

- / -

REMINDER! Please attach two copies of the product(s) to the final report.

See Annex 1 – WORK PACKAGES AND PRODUCTS

VII. PROJECT PARTNERS

VII.1 Please give a brief description of the **role** of each Partner in the different phases of the project.

	Partner's Name	Country	Description of roles
1	Universität Bremen, Forschungszentrum Arbeit, Umwelt, Technik (artec)	Germany (D)	<p><i>Role and contribution in the project:</i> Project Management, research, development of basic concepts, co-ordination of research and development activities, summary of project results. Artec is responsible for the following work packages (WP) and deliverables (D):</p> <p><i>WP 10: Project Management (see Annex 1)</i></p> <ul style="list-style-type: none"> - D10: Basic Material for Project Installation - D11: Consortium Agreement - D12: Project Presentation - D13: Final Report <p><i>WP 20: Technical and Pedagogical concept (see Annex 1)</i></p> <ul style="list-style-type: none"> - D21: Tele-service in industry, basic technologies - D22: Pedagogical Bases: Learning concepts, possible learning arrangements etc <p><i>WP 50: Evaluation and Dissemination</i></p> <ul style="list-style-type: none"> - D50: process analysis, summarisation, documentation: technical, pedagogical concepts, field studies . - D51: Dissemination: Project presentation, public demonstrations, press releases, co-operation with colleges, industry etc.
2	Stockport College	United Kingdom (UK)	<p><i>Role and contribution in the project:</i> Development, documentation and testing of teaching material, realisation of teaching courses. Stockport College is responsible for the following work packages and deliverables :</p> <p><i>WP 40: Teaching Unit "Tele-Service" - Module 2 (see Annex 1))</i></p> <ul style="list-style-type: none"> - D41: Course Concept: Qualifications needs in tele-service, didactical and methodical concept incl. learning aids, material etc. - D42: Documentation of held course: teaching experiences and results <p><i>WP 50: Dissemination (see Annex 1)</i></p> <ul style="list-style-type: none"> - D51: Dissemination: Project presentation, public demonstrations, press releases, co-operation with colleges, industry etc.
3	Technisches Bildungszentrum Mitte (TBZ)	Germany (D)	<p><i>Role and contribution in the project:</i> Development, documentation and testing of teaching material, realisation of teaching courses. TBZ College is responsible for the following work packages and deliverables:</p> <p><i>WP 30: Teaching Unit "Tele-Service" - Module 1 (see Annex 1)</i></p> <ul style="list-style-type: none"> - D31: Course Concept: Qualifications needs in tele-service, didactical and methodical concept incl. learning aids, material etc. - D32: Documentation of held course: teaching experiences and results <p><i>WP 50: Dissemination (see Annex 1))</i></p> <ul style="list-style-type: none"> - D51: Dissemination: Project presentation, public demonstrations, press releases, co-operation with colleges, industry etc.
4	University of Cyprus, DCS	Cyprus (CY)	<p><i>Role and contribution in the project:</i> Research in the application field of teleservice tools and methods. The University of Cyprus is responsible for the following work packages and deliverables:</p> <p><i>WP: 20: Technical and Pedagogical concept (see Annex 1)</i></p> <ul style="list-style-type: none"> - D23: Enabling technologies for tele-service systems, distance learning, groupware and co-operative workspace <p><i>WP 50: Dissemination (see Annex 1)</i></p> <ul style="list-style-type: none"> - D51: Dissemination: Project presentation, public demonstrations, press releases, co-operation with colleges, industry etc.

ANNEX I

COUNTRY CODES			
B	BELGIUM	CY	CYPRUS
DK	DENMARK	CZ	CZECH REPUBLIC
D	GERMANY	SK	SLOVAK REPUBLIC
EL	GREECE	HU	HUNGARY
E	SPAIN	PL	POLAND
F	FRANCE	RO	ROMANIA
IRL	IRELAND	EE	ESTONIA
I	ITALY	LV	LETTONIA
L	LUXEMBOURG	LT	LITUANIA
NL	NETHERLANDS	SI	SLOVENIA
A	AUSTRIA	BG	BULGARIA
P	PORTUGAL		
FIN	FINLAND		
S	SWEDEN		
UK	UNITED KINGDOM		
IS	ICELAND		
FL	LIECHTENSTEIN		
NO	NORWAY		

BENEFICIARY TYPE CODES	
JI	YOUNG PEOPLE IN INITIAL VOCATIONAL TRAINING (NOT AT UNIVERSITY LEVEL)
JT	YOUNG WORKERS
JD	YOUNG GRADUATES
Et	STUDENTS
T	TUTORS
F	TRAINERS, DESIGNERS AND MANAGERS OF TRAINING PROGRAMMES
E	TEACHERS
DRH	SUPERVISORS, MANAGERS, DIRECTORS OF HUMAN RESOURCES
DIR	MANAGERS/OWNERS OF SME
RF	TRAINING MANAGERS
SF	TRAINING EXPERTS (IN U, OF)
SRH	HUMAN RESOURCES EXPERTS (IN U, OF)
P	TRADE UNION OR WORKERS' REPRESENTATIVES
PL	PLANNERS AT REGIONAL LEVEL
TE	COMPANY WORKERS
RP	REPRESENTATIVES OF EMPLOYERS' GROUPS
TS	SOCIAL WORKERS
COR	REPRESENTATIVES OF JOINT BODIES
MQ	THE LESS QUALIFIED
DE	THE UNEMPLOYED
ROS	REPRESENTATIVES OF SECTORIAL ORGANISATIONS
TA	OLDER WORKERS (above 50)
H	DISABLED PERSONS
D	DISADVANTAGED GROUPS
M	MIGRANT WORKERS
DP	VOCATIONAL TRAINING POLICY MAKERS/DECISION MAKERS (Strand III.2.a only)
O	OTHERS

