

# TEN-TELECOM

## Trans-European Telecommunications Networks

### ANNUAL PROJECT REVIEW REPORT 1997

**Contract N. 96/45503**

**Project Acronym: TaRgET**

*Project title TransRegional Education and Training using Euro-ISDN*

#### **Project Coordinator**

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#### **List of Partners**

<i>Organisation</i>	<i>Role</i>	<i>Country</i>
<i>Technology Centre Limburg</i>	<i>Project Management/ Regional Co-ordinator</i>	<i>The Netherlands</i>
<i>Western Connect Ltd</i>	<i>Technical Management</i>	<i>U.K.</i>
<i>VIA</i>	<i>Regional Co-ordinator</i>	<i>Belgium</i>
<i>Greek Productivity Centre</i>	<i>Regional Co-ordinator</i>	<i>Greece</i>
<i>Associazione Centro Elis</i>	<i>Regional Co-ordinator</i>	<i>Italy</i>
<i>RTC Tallaght</i>	<i>Regional Co-ordinator</i>	<i>Ireland</i>
<i>Camara Oviedo</i>	<i>Regional Co-ordinator</i>	<i>Spain</i>
<i>National Defence College</i>	<i>Regional Co-ordinator</i>	<i>Sweden</i>
<i>Hertford Regional College</i>	<i>Regional Co-ordinator</i>	<i>U.K.</i>
<i>North Trafford College</i>	<i>Regional Co-ordinator</i>	<i>U.K.</i>

*Date .....*

<b>Form SA -</b>	<b>PROJECT SELF ASSESSMENT -</b>	<b>Contract N. 96/45503</b>
<b>Project Acronym</b>	<b>TaRgET</b>	

Project Title: Trans Regional Education and Training using Euro-ISDN

Project Coordinator Mr G. McGuckin Signed..... Date:.....

### **1. Assessment of work done during the reporting period.**

Since its commencement on 1 April 1996, the TaRgET project has realised significant achievements. All members of the project management team and regional co-ordinators have strived to obtain maximum progress within the reporting period. The main challenge of the project was to determine the elements of and then develop a trans-regional distance learning platform to form the basis of an innovative approach to the delivery of both education and training and promote the concept of lifelong learning.

This challenge has now been met in all of the ten European regions involved in the project. All of the regional co-ordinators have either completed, or are in the process of delivering distance training to SMEs via Euro-ISDN (overview of regional pilot time schedules provided under Appendix 1). This achievement is even more significant given the fact that at the commencement of the project the majority of training organisations did not have the technical infrastructure or experience of delivering training using desk-top videoconferencing. Furthermore, none of the SMEs involved in the pilots had the available technical infrastructure or previous experience of receiving training via such innovative methods.

However, the whole process involved in the ordering, shipping, installation and familiarisation of the videoconferencing equipment involved a steeper and therefore longer learning curve than originally envisaged (particularly for SMEs). In addition to this, certain regions were delayed considerably due to the slow reactions of their national telecom companies to install the required ISDN lines.

It is for these reasons that the project is running 3 months behind schedule (given the fact that the original date for the start of the pilot trials was the beginning of January 1997 compared to the actual starting date for the majority of pilots of mid-March 1997). Consequently a revised project date of 31 December 1997 has been approved by the Project Officer. This extension will allow for a longer piloting and evaluation period which will ensure that the results of the project, which will be of great interest to a number of different target groups, are fully optimised.

On a transnational level the distance learning platform has been utilised on a number of levels. The project management committee regularly uses videoconference sessions to discuss the progress of the project. Four multi-point videoconferences using both voice-activated and continuous presence modes have taken place for the Training and Technical Working groups. These sessions proved to be very successful as co-ordinators were able to exchange the experiences of the trainers and trainees in their region and also learnt how to participate in multi-point sessions. On a bi-lateral level, members of the 3 defined co-operation groups (as described in section 4.2 of Deliverable 4 *Detailed Installation and Operational Plans*) have held point to point videoconference sessions to link trainers, trainees and developers.

## 2. Current project status

<i>As at (end of reporting date)</i>	<i>Number</i>	<i>Comments, problems with deadlines</i>
Date and status of last progress report  30 June 1997	4	3 quarterly reports submitted to date (April-June 1996, October-December 1996 and April-June 1997). It was agreed that for those Deliverables which acted as progress reports themselves (D3 and D5) it was not required to submit additional progress reports. First Year Progress Report and Cost statements also submitted during May 1997.
Work packages on/before target	4	Workpackages 1,2,3 & 4
Work packages delayed	3	Workpackages 5,6 & 7. Activities delayed due to delay in procurement and commissioning of equipment, ISDN installation and familiarisation process.
Deliverables submitted in reporting period	6	D1- Needs Analysis Report D3- First Phase Report and Feasibility Report D4 -Detailed Installation and Operational Plans
Late deliverables - for reporting period	3	D2 - Technical Evaluation D5 - Pilot Platform Operational D6 - Pilot Platform Operational Reports

## 3. Work done

Are project objectives being met?	Yes ✓	No	<i>comments</i>  <i>The project has realised significant achievements and has successfully met the objectives as outlined in the proposal.</i>
Is work done within the project budget?	Yes ✓	No	<i>comments</i> <i>Although the amount of time required for the installation and familiarisation of the equipment proved to be greater than planned.</i>
Major achievements within reporting period	<i>comments</i> <i>The establishment of a functional TransRegional Euro-ISDN platform. This achievement is particularly significant given the fact that the majority of training organisations as well as the SMEs involved in the pilots had both no technical infrastructure and little previous knowledge of training using desk-top videoconferencing.</i>		

## 4. Outline proposed changes to plan, if appropriate

The whole process involved in ordering, shipping, installation and familiarisation of the videoconferencing equipment proved to involve a steeper and therefore longer learning curve, particularly for SMEs than originally envisaged. In addition to this certain regions have been held back by the rather slow reactions of their national telecom companies to install the required ISDN lines.

As a result, most of the regional pilots were delayed and the project is running 3 months behind the original time schedule which in effect will mean that the final evaluation of all of the regional pilots will be completed during October 1997 as opposed to August 1997.

It is for this reason that the main contractor requested that the project be extended for an extra 3 months to allow for a longer piloting and evaluation period.

**5. Present expectations for Implementation/Exploitation  
at the end of feasibility study.**

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<b>Part A.</b>	<b>Synopsis of Work undertaken</b>
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This section should summarise and draw the attention of the Annual Project Review to the key elements of the project. Supporting information should be included in annex and references to existing project documents should be made, whenever possible.

### **A.1 Objectives of the project**

How and in which extent the work done has contributed to meeting the project objectives, and whether the original objectives need refocussing.

### **A.2 Work done**

Description of the main activities of the project in the reporting period. Give a brief description of the work undertaken within each of the work packages, with reference to the technical deliverables and provide executive summaries of all deliverables. Describe the quality control used by the project management in order to assess the work and the documents produced.

In general, and particularly referred to Euro-ISDN, describe any impact of current or emerging standards on the project's work and the actual or likely contribution of the project on the work of standardisation bodies as well on the practical use.

## **MAIN ACTIVITIES**

Following the outcomes of an initial feasibility study, the main activities have involved the implementation and operation of a trans-regional distance learning platform using Euro-ISDN at ten education and training institutions. These activities have included the adaptation of existing training material to ensure it is suited to this method of delivery and, in close collaboration with SMEs in each region, the logistical organisation of providing training to employees via desktop videoconferencing.

## **WORKPACKAGE ACTIVITIES**

### **WP 1 - Information Needs Analysis**

The main activities involved information gathering in each region concerning strategic sectors, technological developments taking place within these sectors, the training target groups of the organisation and future training needs. Suitable existing training materials to be adapted. A suitable SME which both required such training and whose management were interested and committed to be involved in the activities of the TaRgET project was then identified.

In June 1996 the project management analysed the results from Workpackage 1 activities which were integrated into **Deliverable 1 - Needs Analysis Report**.

### **Workpackage 2 - TECHNICAL EVALUATION**

Between June - September 1996 the activities related to Workpackage 2, Technical Evaluation were conducted by the Technical Management.. Questionnaires were distributed to TaRgET partners to establish current technologies used and the applications required for the training courses. Network operators were contacted to determine availability and pricing of Euro-ISDN services to all TaRgET regions. Research into the European videoconferencing market was undertaken. Taking into account the responses from the questionnaires, products from six

manufacturers were obtained and their performance evaluated. The technical evaluation addressed the following factors: Availability; Functionality and Ease of Use; Standards Compliance; Hardware and Software Requirements; Peripherals and Costs.

At the beginning of September 1996, the findings from Workpackage 2 activities were integrated into **Deliverable 2 - Technical Evaluation**.

### **Workpackage 3 - CO-OPERATION MODELS**

Based on the information from WP 1 and 2, during WP 3 the identification of both regional and trans-regional co-operation models were developed. These models, which took into account the experiences of the training organisations and training needs of the SME, defined how the Euro-ISDN platform would function on an operational level. Basic and advanced levels of co-operation were defined. On the basic level the Euro-ISDN platform would be used for communication purposes. On the advanced level, the platform would be used: to support or guide training, to deliver training to SMEs and to develop training materials. Transregionally, the advanced co-operation activities were divided into 5 progressive levels. All regional co-ordinators would participate at both Level 4 -transregional training using Euro-ISDN (as each partner would receive a 2 hour workshop via videoconference from a Belgian University on the use of desktop videoconferencing for training ), and Level 5 - transregional multi-point sessions (through the linking of the project technical and training working groups.

### **Workpackage 4 - FEASIBILITY REPORT**

From mid to late September, the project management gathered information from Workpackages 1-3 to form **Deliverable 3 - First Phase Report and Feasibility Report** .

The main factors concerning the feasibility of the continuation of the TaRgET project activities concerned technical, financial, organisational and operational issues. The activities of WPs 1-3 ensured that the project success factors could be met. Regional training needs had been successfully defined, regional -co-ordinator organisations had existing materials which could be adapted to meet the regional training needs; there was at least 1 SME in each region which required this training and was willing to co-operate in the pilot trials; necessary hardware/software and Euro-ISDN facilities were available in all partner countries; videoconferencing manufacturers/distributors could support their products in all TaRgET countries; suitable 'train the trainer' materials on the use of videoconferencing had been identified; the cost analysis investigations reflected that it was possible to conduct the activities within the project budget; the activities could be organised into successful regional and trans-regional co- operation models.

The Feasibility Study was the major deliverable of the first phase of the TaRgET project. The completion of this report and the activities connected to Workpackage 1-4 brought to a close Phase 1.

### **Workpackage 5 - IMPLEMENTATION AND OPERATIONAL PLANNING**

During Workpackage 5, the following tasks were conducted:

- technical timetable formulated for procurement, installation and training. It was envisaged that by the end of November 1996, equipment would be delivered to regional co-ordinators and SMEs and during December 1996, the installation and training process would take place.

- regional co-ordinators finalised all detailed arrangements concerning the pilot projects i.e the syllabus, module breakdown and schedule for delivery and videoconference sessions;
- regional co-ordinators made frequent visits to the SMEs involved in the project to clarify and finalise arrangements for the operational phase;
- project management gathered information concerning the following detailed operational plans of each regional pilot:
  - training content to be delivered;
  - the time scale for each project;
  - time schedule of the videoconferencing sessions;
- project management developed further transregional co-operation plans;
- organisation of train the trainer workshops in the use of videoconferencing;
- platform cost analysis investigations;
- project management conducted research into the evaluation of videoconference sessions;
- project and technical management developed project evaluation procedures. The evaluation criteria and mechanisms were developed both for a trainer and trainee perspective;

The activities of Workpackage 5 culminated with the production of **Deliverable 4 - Detailed Installation and Operational Plans** in early November 1996.

## **Workpackage 6 - PROCUREMENT AND COMMISSIONING**

During WP 6, the technical Management conducted the following activities:

- Checks on the status of ISDN line installation (in both co-ordinator organisations and SMEs)
- Negotiations with Nokia concerning the purchase of the Nokia Mediastations for the TaRgET project activities;
- Negotiations with VCON manufacturers to supply the videoconferencing software;
- Requisitioning of Nokia mediastations and VCON units;

- Co-ordination of ordering and shipping of technical equipment to all regional coordinators and SMEs;
- Organisation of technical training in the use of the equipment for all regional coordinators
- Finalisation of technical evaluation criteria and mechanisms for the project.

Due to a number of unforeseen circumstances, the technical procurement and commissioning phase took longer than anticipated therefore the technical procurement, installation and commissioning of the equipment phase of the project was extended until February 1997.

At the beginning of February 1997 a report of the activities of Workpackage 6 and an outline of the equipment status in each region was provided in **Deliverable 5 - Pilot Platform Operational**

### **Phase 3 - OPERATION AND EVALUATION**

For the majority of the partners, the third phase of the project, Operation and Evaluation commenced during February - April 1997. During this phase of the project, the operation of the Euro-ISDN distance learning platform will occur over a period of 8 months. The detailed operational plans developed during WP5 are currently being executed during this phase.

### **Workpackage 7 - OPERATIONAL CO-ORDINATION**

Based on the tasks defined in WP 5, all regional co-ordinators are currently working on both a regional and transregional basis on the development and delivery of distance learning using Euro-ISDN. To date, these activities have included the following:

- TRAINING:

Train the Trainer Workshop in the use of videoconferencing delivered by Audiovisuele Dienst, K.U Leuven delivered to the majority of partners and SMEs. This workshop (which consisted of a two-hour videoconference session plus a fifty page handbook on the effective use of desktop videoconferencing for education and training purposes) has proved to be a valuable investment of the partners. The addition of tele-tutored support was a very important factor for the majority of partners who, as inexperienced users of videoconferencing, were provided with 'hands-on' expert advice. As the



Audiovisuele Dienst also had access to a Nokia Mediastation, it was possible during the workshops to test the applications such as whiteboarding, file transfer and application sharing. The two remaining partners will receive this training in April 1997. This process has facilitated knowledge transfer between University, Higher Education/Training establishments and SMEs;

- FAMILIARISATION:

During this period, an important element has been for both the trainers and trainees to familiarise themselves with using the videoconferencing equipment. Consequently, the project management has acted in a strong supporting role, linking with regional coordinators to enable testing of the various applications to be used during the pilots.

- REGIONAL PILOT KICK-OFF:

During this phase all partners have been involved in extensive contacts with the SME in their region ensuring that the technical infrastructure and equipment in the company is working correctly. As this process has been a very steep learning curve both for the SMEs and the majority of training organisations, the process involved up to day 1 of the delivery of the pilot has been considerably more time-consuming than originally anticipated;

- TRANS-REGIONAL KICK-OFF

On March 25 1997 the Technical Working Group for the TaRgET project (made up of half of the total partnership) met via a transnational multi-point, continuous presence videoconference link. On March 26 1997 the Training Working Group for the project met also via a multi-point, continuous presence link. These links, which both tested the trans-regional distance learning platform for the first time and facilitated joint discussion on the progress of each region, were co-ordinated by the technical and project management team. The multi-point links were established using the bridging services of the Dutch Telecom company PTT.

## **Workpackage 8 - EVALUATION**

Based on the evaluation criteria and mechanisms defined during WP 5 and 6, this workpackage will involve the evaluation of all aspects of the system, including training development and delivery effectiveness, cost, operational and technical effectiveness.

From January 1997 to date, the following activities related to WP 8 have taken place:

## Quality Control

Each 3 months the regional co-ordinators were requested to submit overall progress reports to the project manager. This process enables close monitoring of regional activities.

Concerning the detailed technical and educational experiences of the pilots themselves, the project and technical management developed questionnaires to record the following:

- technical performance and outcomes of each videoconference;
- monthly trainer summary;
- trainee experiences (after the first month of training and at the end of the pilot).

The questionnaires (which can be found in section 4 of Deliverable 5) were made available to all partners and participating SMEs in November 1996. The forms are submitted monthly to the management team to enable ongoing analysis of the operation of the platform.

The reporting documents produced during the project are analysed by all members of the project team (project co-ordinator, project manager and technical manager) prior to submission.

### A.3 Problems encountered

An analysis of any problems or difficulties which have been addressed, whether of a technical or organisational point of view. Summarise the reasons and events leading to any change of direction or approach which the project has felt necessary to adopt.

BERNARD TECHNICAL DIFFICULTIES

### A.4 Commercial validation activities

Outline the validation undertaken in the project and/or any subsequent plans for doing so. Describe the trials and/or pilots (to be) undertaken ensuring that following information is provided; elements from any marketing study or user representation group section should be used. In particular, indicate: Pilot/users' target (type and number), Sectors involved, Sites, Technology used, Evaluation methodology/ results, Feedback, potential uptake, extensions of the work etc., Mechanism for user acceptance and validation.

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### A.5 Cooperation activities with other EC projects

Indicate any established or needed interaction with other EC projects (in Programmes TEN-Telecom, Telematics , ACTS, Esprit etc.).

As highlighted in the Feasibility Study, a strong success factor for the success of the training activities was the strong recommendation that participants (mentors, trainers and trainees) should be thoroughly trained in the use of videoconferencing prior to the operational phase of the project. It was for this reason that the Audio Visual Department of the Katholieke Universiteit Leuven was assigned to provide a two hour workshop (via videoconference) to all regional co-ordinators. The director-

producer of the department (who delivered the training) played a central role in the Multimedia Teleschool programmes for the Delta programme as well the EOUN project and EuroPace 2000 programmes.

Four partners from the TaRgET project have been successful in the submission of projects submitted under the ADAPT-BIS programme. The project entitled TRADES (Trans Regional Access to Distance Education and Support to commence in January 1998, will build upon the experiences gained under TaRgET

#### **A.6 Contribution to a competitive market**

provide an analysis of the actual and potential contribution of the project to the deployment of innovative services in a competitive environment.

GERRY

#### **A.7 Dissemination activities and exploitation plans**

Describe the main diffusion type activities both actual and planned, e.g. organisation of workshops, conferences, key papers delivered and published, etc.

The activities of the TaRgET project have been promoted at a number of European conferences:

September 1996 Picturetel User Group Annual Conference, Barcelona - Presentation of TaRgET project, Colonel Bengt Kroon, Swedish War College;

15 May 1997 Picturetel SIG Distance Learning Multipoint Videoconference - Presentation of TaRgET project, Belinda Tanner, Technology Centre Limburg

13 January 1997 - ISDN , A.Slavin, Western Connect Ltd.

#### **A.10 Contribution to TEN-Telecom objectives (as appropriate)**

Highlight the contribution of the project work to achieving the TEN-Telecom programme objectives:

-strengthening of the internal market, -stimulating competitiveness of industry,- meeting the needs of identified users, -helping socio-economic cohesion, -creation of new activities and employment, -deployment of services based on the use of Euro-ISDN network, -European added value in terms of interoperability of services and products.

<b>Part B -</b>	<b>Future project plans</b>
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#### **B.1 Changes to the project plan, if appropriate**

Brief description of the main work to be carried out in the following year and when it is likely to be completed, and any proposed significant changes to the overall project programme.

#### **B.2 Structure of the work packages**

Report any changes on the structure, composition, interdependence and sequence of work packages, based on the project programme. Changes are intended to respect the contractual conditions and costs.

### B.3 External dependencies and relationships

Indicate any change foreseen to the project relationships and/or dependencies.

<b>Part C - Plans for Exploitation and Implementation</b>
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#### GERRY

##### C.1 Main thrust and direction of your exploitation plan.

##### C.2 Contribution of the feasibility phase to respond to market needs.

##### C.3 Development and/or enhancement of Euro-ISDN based services:

- Future plans, commercial and market possibilities.
- Commitment and ability of the participants to operate in the market areas involved, to assure the transfer of the results into practical and effective use.

##### C.4 Main findings and conclusions.

##### C.5 End Product/Service description:

Description of the delivery product/service and its purpose: Date of planned release, Type (specifications, services, software, communication/application solution), Client target (profile, dimension, localisation), Expected benefits, Others.

<b>Part D. Project Programme</b>
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Structure, composition, timing, interdependency of the different work packages resulting from the activity planned for the organisations which participate in the project.

#### D.1 Participants' Contribution

Organisation	Role	Workpackages involved in	Budget (ECU)	Men-months planned	Men-months used
<i>NWIFHE</i>	<i>CT/CO</i>	<i>1-8</i>	<i>99,472</i>	<i>8.85</i>	<i>8.9</i>
<i>TCL</i>	<i>SC</i>	<i>1-8</i>	<i>124,663</i>	<i>10.85</i>	<i>11</i>
<i>Western Connect</i>	<i>SC</i>	<i>1-8</i>	<i>110,123</i>	<i>10.45</i>	<i>10.1</i>
<i>RTC Tallaght</i>	<i>SC</i>	<i>1-8</i>	<i>58,850</i>	<i>6.1</i>	<i>6.66</i>
<i>Camara Oviedo</i>	<i>SC</i>	<i>1-8</i>	<i>58,850</i>	<i>6.1</i>	<i>6.2</i>
<i>VIA</i>	<i>SC</i>	<i>1-7</i>	<i>58,850</i>	<i>6.1</i>	<i>5.25</i>
<i>Greek P. Centre</i>	<i>SC</i>	<i>1-7</i>	<i>58,850</i>	<i>6.1</i>	<i>5</i>

<b>Nat. Defence College</b>	<b>SC</b>	<b>1-8</b>	<b>58,850</b>	<b>6.1</b>	<b>6.45</b>
<b>Centro Elis</b>	<b>SC</b>	<b>1-8</b>	<b>58,850</b>	<b>6.1</b>	<b>17.4</b>
<b>Hertford Reg.College.</b>	<b>SC</b>	<b>1-8</b>	<b>58,850</b>	<b>6.1</b>	<b>5.75</b>
<b>North Traff. College</b>	<b>SC</b>	<b>1-8</b>	<b>44,999</b>	<b>4.2</b>	<b>3.8</b>
Total			<b>791,207</b>	<b>77.05</b>	<b>86.51</b>

CO= coordinator

CT= contractor

PO = participating organisation

SC = sub-contractor of CT/CO

## D.2 Project Activities

Work package	Deliverables	Tot. men-month planned	Tot. men-months used
Information Needs Analysis	Needs Analysis Report	5.0	6.12
Technical Evaluation	Technical Evaluation	4.1	5.37
Co-operation Models	-	2.95	3.97
Feasibility Report	First Phase Report and Feasibility Study	2.5	4.7
Implementation and Operational Planning	Detailed Operational and Installation Plans	4.0	6.55
Procurement and Commissioning	Pilot Platform Operational	4.25	7.4
Operational Co-ordination	Pilot Platform Operational Reports	54.25	50.35
Evaluation			2.05
Total		77.05	86.51

## Part E. Deliverables in the reporting period

A list should contain all deliverables due on or before the end of the reporting period.

Reference number	Title	Date due	Date submitted	Target date if overdue
1	Needs Analysis Report	30.06.96	30.06.96	
2	Technical Evaluation	31.07.96	15.09.96	15.09.96
3	First Phase Report and Feasibility Study	30.09.96	30.09.96	
4	Detailed Installation and Operational Plans	31.10.96	05.12.96	05.12.96
5	Pilot Platform Operational	30.11.96	15.02.97	
6	Pilot Platform Operational Reports	30.04.97	17.07.97	15.07.97

