EVALUATION REPORT
VS/2001/0399

DIALOG ON

ESF ARTICLE 6 Innovative Measures

Steve Walker
Leeds Metropolitan University
Date: May 2004
Summary

The report covers two major areas of outcome for the evaluation activity: performance against project and network targets; and lessons learned which might inform future activities. DIALOG ON has been an ambitious and large-scale project successfully providing a wide range of learning and organisational development opportunities to partner organisations and trade union members. Apart from a small shortfall in the number of trade union officers and representatives training in the Networking strand, targets for training were met or exceeded. Where original plans were not achieved, this was more than compensated for by additional activities, resulting in the global training figure exceeding targets by 7%. Partner organisations reported significantly developing their capacities in several key areas. Partner organisations widely reported appreciation of high quality organisational, pedagogical and technological support from ETUCO.

Performance targets

Project targets

- DIALOG ON delivered 32 courses, exceeding the target of 31, training a total of 471 trade union officers and representatives, exceeding the target of 443, and 27 trainers/animators (target 24)
- DIALOG ON exceeded the target of establishing eight networks, with a total of 320 participants

Strand targets - Networks

- 10 training courses were delivered, exceeding the target by 1
- 13 (target 10) animators were trained
- 122 (target 128) trade union officers and representatives were trained

Strand targets - CMDL

- 14 CMDL courses were delivered (target 14). Recruitment difficulties resulted in the cancellation of 2 national CMDL courses though this was more than compensated for by the delivery of two additional national courses by CISL
- 14 (target 14) trainers received training
- 244 (target 225) trade union officers and representatives received training

Strand targets - Web Portals

- The target of one international workshop and five training events was met
- 105 people participated, exceeding the targeted total by 15

Lessons learned

As well as meeting its numeric targets, DIALOG ON provided a fertile source of learning to inform future activities in important areas of activity for European trade unions, both identifying issues and refining ideas.
- **Network design**: a more refined view of networking has been developed through the project

- **Skills needs**: clarification and refinement of understandings of skills needs, particularly in the area of managing organisational networks

- **Capacity development**: development of the capacity of national confederations in delivering e-learning opportunities

- **Language**: language remains a significant difficulty in the design of transnational online networks and CMDL

- **Technology**: the technological basis was widely reported as effective, though recent developments now offer a number of new communication opportunities
# Table of Contents

1 Introduction ..................................................................................... 5
2 Evaluation Methods ...........................................................................6
   2.1 Introduction ...............................................................................6
   2.2 Networking strand.......................................................................6
   2.3 CMDL Strand ...........................................................................7
3 Performance and success criteria .........................................................8
   3.1 Project level indicators .................................................................8
   3.2 WP02 Network level indicators and criteria .....................................8
       3.2.1 Overview ...........................................................................8
       3.2.2 Network level ....................................................................9
       3.2.3 Issues identified .................................................................12
   3.3 WP03 CMDL partnership indicators ..............................................13
       3.3.1 Overview ..........................................................................13
       3.3.2 Course level ......................................................................13
       3.3.3 Issues raised ....................................................................17
   3.4 WP05 Web portals indicators ......................................................18
4 Overarching themes ........................................................................ 19
   4.1 Overview ................................................................................. 19
   4.2 Language ................................................................................. 19
   4.3 What do we mean by network? ................................................... 20
       4.3.1 CMDL and organisational networking .................................. 20
       4.3.2 Distinguishing types of organisational network ..................... 21
   4.4 Designing learning and organisational networks to motivate online
       participation ............................................................................. 22
   4.5 The role of the network animator ................................................. 24
   4.6 CMDL Trainers ........................................................................ 25
   4.7 Information & Communication Technology .................................... 26
       4.7.1 FirstClass ......................................................................... 26
       4.7.2 Other communications technologies ................................... 27
1 Introduction

DIALOG ON was an ambitious project seeking to develop a range of new working and learning practices, particularly among trade unions working at transnational level. DIALOG ON has been an ambitious and large scale project successfully providing a wide range of learning and organisational development opportunities to partner organisations and trade union members. Targets for courses delivered and participants trained were all at least close to being attained, and in several cases exceeded. Partner organisations have been widely appreciative of the high quality of educational, organisational and technical support provided centrally by the ETUCO team. Given the complexity and novelty of the project, much has been learned from the process. This report aims to capture key learning points. Consequently, this includes discussion of those areas of the project which raise complex issues and highlights ways in which this work can be taken forward in future projects.

The primary audience for this Evaluation Report is the partners in the DIALOG ON project. The evaluation did not aim to cover all of the project activities, but to concentrate on the key areas of transnational CMDL and organisational networking. Major areas of activity including the delivery of the training trainers programme and associated materials, delivery of national CMDL courses and the Web Portals strand have not been addressed in detail. Also, the report does not aim to report on all of the data gathered during the project. Rather it highlights key issues emerging during the projects (with supporting data where appropriate) in a form that is intended to promote discussion and help the planning of future activities in these areas.

The objectives of the evaluation activities, as specified in the Project Evaluation Plan were:

- To assist the project management in monitoring progress and identifying emerging problems and opportunities (formative evaluation);
- To identify lessons and experiences which can inform future trade union activities in these and related areas (summative evaluation).

This report presents the main summative findings from the DIALOG ON project evaluation, corresponding to the second of these objectives. A broadly analytic or theory-based approach was taken to this aspect of the evaluation, in an attempt to identify some of the valuable lessons to be drawn from the project. This requires some form of analytic evaluation, particularly of the assumptions (implicit or explicit) made about how project activities produce certain outcomes.

The remainder of the report is structured as follows: Section 2 outlines the evaluation methods used, Section 3 summarises performance of the project and its key components against the agreed indicators and criteria at both project and network/CMDL course levels. Section 4 discusses the major themes emerging from the project, in particular highlighting lessons drawn which might inform future work in this area.
2 Evaluation Methods

2.1 Introduction

The evaluation concentrated on the two areas of the project likely to be most fruitful in identifying lessons for future practice: the networking strand, which is a relatively novel area of work both for ETUCO and many of the sectoral organisations, and the transnational CMDL activities.

2.1.1 Networking strand

The evaluation of the networking strand conceived of the strand as a series of case studies of training interventions intended to established networks. These interventions contributed to transforming a prior, less-organised state into a subsequent state characterised by more intense communications among the network participants. In participating in these networks both animators and participants make use of the technological and other resources available to them, their understandings of the network and its purpose, and the norms they share with others both locally and within the network. The precise natures of the ‘before’ state varied significantly (for example, in size of the target audience for the networks, prior levels of organisation etc). Similarly, the intended subsequent state varied substantially across the cases. At the strand start-up workshop, network representatives were asked to identify quantitative and qualitative evaluation criteria by which success of the networks might be identified, and what indicators might be used.
Data were gathered by:

- Participant profile: characteristics of network participant
- Network participant evaluation questionnaire (posted ~1 year after each network was launched)
- Interviews with network animators and sponsors (throughout project)
- Content analysis of network conferences
- Conference usage trend analysis
- Evaluator attendance at/participation in presentations (Strand Start-up, Concertation and Final Conference events)
- Animator participation in Evaluation Workshop activities.

Detailed network ‘site summaries’ were produced presenting data from these multiple sources in a common format.

### 2.1.2 CMDL Strand

The evaluation of the CMDL Strand activities concentrated on the transnational courses, where partner organisations have less experience of the particular issues and constraints this level of working raises. As with the Networking Strand, the transnational courses were conceived of as a series of case studies. Trainers were asked to identify success criteria and indicators for their courses as part of the trainer training activities.

Data were gathered by:

- Course participant profile: characteristics of network participant
- Course participant evaluation questionnaire
- Content analysis of network conferences
- Conference usage trend analysis
- Evaluator attendance at/participation in presentations (Strand Start-up, Concertation and Final Conference events);
- Trainer participation in Evaluation Workshop activities.

Detailed network ‘site summaries’ were produced presenting data from these multiple sources in a common format.
3 Performance and success criteria

3.1 Project indicators

Evaluation indicators and criteria were identified at both the overall project level and at the levels of individual projects. The overall project targets were expressed as courses to be delivered and numbers trained (either as animators/trainers or as ‘end-learners’) and summarised in Table 3.1.

Overall targets for delivering training were slightly exceeded. One more course was delivered than originally planned, three more animators were trained and ten more trade union officers and representatives.

Table 3.1 – Project courses and training

<table>
<thead>
<tr>
<th>Project target</th>
<th>Achieved</th>
<th>%age over/under</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. courses</td>
<td>31</td>
<td>32</td>
</tr>
<tr>
<td>Numbers trained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. animators/trainers trained</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>No. trade union officers &amp; representatives trained</td>
<td>443</td>
<td>471</td>
</tr>
<tr>
<td>Total trained</td>
<td>467</td>
<td>498</td>
</tr>
</tbody>
</table>

More detail on each strand is given in the following sub-sections. Partners in the CMDL and Networking Strands agreed further qualitative and quantitative criteria by which they could assess their own achievements. These are presented in the following two sections 3.2 and 3.3. The performance indicators for the Web Portals Strand are given in section 3.4 below.

3.2 Networking strand indicators

3.2.1 Overview

Table 3.2 below summarises the global quantitative achievements of the Networking Strand. One training animators course was envisaged, followed by eight courses for individual networks, each comprising two workshops. The proposal envisaged eight sectoral networks (and an additional animators network which functioned only fitfully). While useful exchanges among animators happened at face-to-face events during the project (the Strand Start-Up Workshop, Concertation Meeting, Evaluation Workshop and Final Conference) there was no sustained online activity among the animators. An additional network was established during the project by one of the sectoral organisations (ETUCE) bringing together legal experts, hence the overall target number of sectoral networks was exceeded and an additional course delivered.

Table 3.2 – Network activities

<table>
<thead>
<tr>
<th></th>
<th>Target</th>
<th>Achieved</th>
<th>%age over/under</th>
</tr>
</thead>
<tbody>
<tr>
<td>Networks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of sectoral networks</td>
<td>8</td>
<td>9</td>
<td>+12.5%</td>
</tr>
<tr>
<td>No. courses</td>
<td>9</td>
<td>10</td>
<td>+11%</td>
</tr>
<tr>
<td>Numbers trained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. animators trained</td>
<td>10</td>
<td>13</td>
<td>+30%</td>
</tr>
<tr>
<td>No. trade union officers &amp; representatives trained</td>
<td>128</td>
<td>122</td>
<td>-4.5%</td>
</tr>
<tr>
<td>Total trained</td>
<td>138</td>
<td>135</td>
<td>-2%</td>
</tr>
</tbody>
</table>
Table 3.3 below summarises participation in the individual project networks and their associated training events. All networks organised two residential workshops for a core of their participants in the project. The ETUCE HERC was additionally the site for a pilot of the course, so had three residential workshops, as well as an additional training day for network members from Central and Eastern Europe, which was funded off budget. A third residential workshop was organised for the EFBWW EWC Co-ordination network. The numbers participating in ‘training’ refers to the number participating in at least one of the project’s residential workshops for each network. It does not include network participants (or animators) who benefited from informal training sessions organised for them by ETUCO staff and held in Brussels. ‘Participants’ refers to the numbers of participants subscribed to the network conferences at the end of the project.

<table>
<thead>
<tr>
<th>Network</th>
<th>No. Trained</th>
<th>Subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFBWW EWC Co-ordination</td>
<td>17</td>
<td>57</td>
</tr>
<tr>
<td>EFBWW Health &amp; Safety/Risk</td>
<td>11</td>
<td>24</td>
</tr>
<tr>
<td>EMCEF</td>
<td>10</td>
<td>59</td>
</tr>
<tr>
<td>ETUCE Chief Negotiators</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>ETUCE HERC</td>
<td>14</td>
<td>36</td>
</tr>
<tr>
<td>ETUCE Quality in Education</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>Transport</td>
<td>13</td>
<td>41</td>
</tr>
<tr>
<td>UNI-Europa Graphical</td>
<td>13</td>
<td>37</td>
</tr>
<tr>
<td>Subtotal</td>
<td>106</td>
<td>295</td>
</tr>
<tr>
<td>ETUCE Legal Experts(^1)</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>122</strong></td>
<td><strong>320</strong></td>
</tr>
</tbody>
</table>

In addition, 139 files were exchanged during the lifetime of the DIALOG ON project in an Open Forum on European Works Councils issues. The project supported a maximum of sixteen residential trainees per network. Most networks came close to achieving this, though two networks reported significant difficulties in identifying and recruiting participants. Numerically, the shortfall was largely offset by the delivery of training to the additional Legal Experts’ network.

### 3.2.2 Network level

At the Strand Start-Up Workshop, representatives of each network were invited to propose quantitative and qualitative indicators and criteria of success. The indicators chosen had a large degree of overlap between the networks.

**Quantitative**: the primary quantitative indicators of participation in the network were numbers of participants and the levels and distribution of their contribution. The primary difficulty in establishing *ex ante* quantitative criteria lay in the novelty of the networks being established. Before experiencing the networks, the animators and others involved could not realistically identify, for example, how many messages would constitute success.

**Qualitative**: qualitative indicators proposed were:

- better service for the organisation
- satisfaction of participants and animators
- effectiveness of work
- outcomes (e.g. documents, policies, publications, information)

\(^1\) An additional network set up as part of mainstreaming activities within the project
As with the quantitative indicators, ascribing precise success criteria in the absence of experience of this way of working was necessarily a little speculative.

Consequently, the evaluation has taken these qualitative and quantitative indicators as broad areas in which to explore whether participants (animators and trainers) considered the networks to be successful. Fig 3.4 below briefly summarises each network quantitatively (no. of conference subscribers, no. of messages posted during the first year of activity), major qualitative outcomes and issues raised/lessons which might be drawn from the experience. The primary concern has been to identify lessons for future work in this area.
<table>
<thead>
<tr>
<th>Group</th>
<th>No. Subs.</th>
<th>No. Mgs</th>
<th>Brief Purpose/Description</th>
<th>Major Outcomes</th>
<th>Issues &amp; difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFBWW EWC</td>
<td>57</td>
<td>72</td>
<td>Co-ordination of EWC activities in sector, based on EWC co-ordinators’ group which meets twice-yearly</td>
<td>Used by EWC co-ordination steering group to exchange documents and prepare meetings; Isolated examples of information exchange re: specific EWCs</td>
<td>Low participation; Limited resources for animation; Low language &amp; computer skills in sector</td>
</tr>
<tr>
<td>EFBWW Risk/Health &amp; Safety</td>
<td>24</td>
<td>111</td>
<td>Information exchange on health &amp; safety, building on existing working group on this topic</td>
<td>Partial review of common Health and Safety text</td>
<td>Difficulties with recruitment; Limited resources for animation; Low language &amp; computer skills in sector; Movement of key staff</td>
</tr>
<tr>
<td>EMCEF EWC</td>
<td>59</td>
<td>131</td>
<td>Co-ordination of EWC activities in sector through development of strategies by the Ad Hoc Committee on EWCs</td>
<td>Developing list of EWC co-ordinators</td>
<td>Difficulties in developing participation among AHC and other network members; Network discontinued</td>
</tr>
<tr>
<td>ETUCE Chief Negotiators</td>
<td>19</td>
<td>79</td>
<td>Establish network of chief negotiators in teachers’ unions</td>
<td>Collection of national union profiles; Compilation of comparative data on pay levels</td>
<td>Low participation; No prior history of working together</td>
</tr>
<tr>
<td>ETUCE HERC</td>
<td>31</td>
<td>207</td>
<td>Augment the work of the 30-member Higher Education and Research Standing Committee</td>
<td>Elaboration of policy and position documents e.g. for submission to EU, and ETUCE policy development</td>
<td>Language; Tension between extending participation and maintaining decision-making processes</td>
</tr>
<tr>
<td>ETUCE Quality in Education</td>
<td>22</td>
<td>184</td>
<td>Extend work of ETUCE panel on Quality in Education</td>
<td>Production of report on Quality in Education, presented to ETUCE policy conference; Broaden participation in discussions related to European policy developments and processes.</td>
<td>Language; Expansion of network to participants from new member states; Identify concrete work tasks for future work</td>
</tr>
<tr>
<td>Transport</td>
<td>41</td>
<td>262</td>
<td>Improve communication within and between EWCs and union, discuss EWC strategy in the sector and discuss/develop the profile of EWC co-ordinators</td>
<td>List of EWCs in sector; List of companies meeting requirements for EWCs; Collection of basic information on main EWC agreements Information exchange on a range of topics; Establishment of first company-specific sub-network</td>
<td>Language; Movement of animators; Uneven levels of participation</td>
</tr>
<tr>
<td>UNI-Europa Graphical</td>
<td>37</td>
<td>153</td>
<td>Improve information and communication in collective bargaining in sector and improve transnational co-operation</td>
<td>Move to electronic distribution of annual collective bargaining questionnaire; Distribution of working group reports</td>
<td>Language; Movement of key staff Difficulty in sustaining activity beyond immediate aftermath of face-to-face meeting</td>
</tr>
</tbody>
</table>
3.2.3 Issues identified

Significantly, despite the difficulties encountered by some networks, only a single organisation (EMCEF) has taken a decision to discontinue the conference-based approach to networking, developing instead alternative network/information dissemination methods. The remainder have clearly indicated a commitment to the approach and are taking actions to further the development of their networks. A number of issues can readily be identified from the experiences to date as being associated with more or less successful networking and participant motivation.

Importance of face-to-face encounters: online networks work better where there are also opportunities for participants to communicate face-to-face. This can be seen both in the increase in online activity before and after face-to-face events. Also, creating networks that extend the work of existing organisational work (e.g. working groups) is simpler than creating these structures online for the first time.

Language: language difficulties were reported as an issue for all networks, though to different extents, depending on the profiles of network participants.

ICT skills: participants generally reported that they found the specifics of using FirstClass straightforward. However, some qualitative feedback suggested that in some cases, levels of general ‘background’ ICT skills hindered network use (e.g. in handling multiple file formats and organising information locally).

Importance of concrete tasks: networks function better where there are concrete, structured tasks and activities to be carried out. The more informal information exchange non task-specific tasks, which can form an important part of the value of networking, may subsequently be built on task-related communication.

Fitting tasks to the needs of participants: the design of tasks needs to create benefits for all participants, in order to sustain motivation. In particular, participation in transnational/trans-company activities needs to provide direct benefits in the short-medium term (as well as long-term) to participants working at company or national levels, as well as those working at the European level.

Importance of animation: active animation is associated with greater levels of participant communication. Hence it is important that organisational sponsors of networks can ensure time for animators’ work, either as part of work allocation or in the selection of external animators.

Turnover of animators: trained animators or network ‘champions’ associated with all networks moved on during the life of the project. The effect of this varied from network to network but created significant difficulties for some. It was handled more effectively where there was a clear organisational commitment to the development of the network. Also, this turnover has implications for the provision of training. In order to sustain networks in the longer term, some ongoing programme of animator training needs to be established.

Involvement of leadership: the involvement of leadership figures in networks can both help to ensure that unforeseen difficulties (such as animators leaving) can more readily be dealt with, and can help to motivate participation by others.

Is critical mass important? It is worth noting one rather counter-intuitive observation from the project. There was a strong negative correlation between the size of a network and the average number of contributions made by individual participants. There are a number of possible explanations for this, but it suggests that a simple view that once enough participants are involved the network will to some extent become self-sustaining is not borne out by experience.
3.3 CMDL strand indicators

3.3.1 Overview

Table 3.5 below summarises the number of courses and participants trained in the CMDL strand. All seven of the planned transnational courses ran. Two of the planned national courses (those of the LO in Sweden and CFDT in France) did not run, in both cases following reported difficulties in recruiting participants (though it is not clear whether this can be attributed to the content or the methods of the courses). In addition, however, CISL ran two courses at the national level as part of a mainstreaming exercise within the project.

Support was available for sixteen participants on each transnational course. Where the courses ran, there was an average 14.6 of participants. Significant difficulties in recruiting were reported for only one of the transnational courses.

<table>
<thead>
<tr>
<th>Table 3.5 – CMDL strand activities</th>
<th>Strand target</th>
<th>Achieved</th>
<th>% age over/under</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. courses</td>
<td>14</td>
<td>14</td>
<td>0%</td>
</tr>
<tr>
<td>Numbers trained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. trainers trained</td>
<td></td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>No. trade union officers &amp; representatives trained</td>
<td></td>
<td>225</td>
<td>244</td>
</tr>
<tr>
<td>Totals trained</td>
<td></td>
<td>239</td>
<td>258</td>
</tr>
</tbody>
</table>

Table 3.6 below summarises the global training figures for the CMDL Strand. The 14 planned courses were made up of seven national courses and seven transnational courses.

<table>
<thead>
<tr>
<th>Table 3.6 – CMDL strand participants</th>
<th>Courses</th>
<th>No. Participants National</th>
<th>No. Participants Transnational</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFDT-CC.OO</td>
<td>1</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>CGIL-CC.OO</td>
<td>2</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>CGTP-UGTE</td>
<td>2</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>CISL-CFDT</td>
<td>2</td>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td>LO-S-NNF</td>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>ÖGB-CGIL</td>
<td>2</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>TUC-LO-D</td>
<td>2</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Subtotal</td>
<td>12</td>
<td>90</td>
<td>101</td>
</tr>
<tr>
<td>CISL(^3)</td>
<td>1 + 1</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>143</td>
<td>101</td>
</tr>
</tbody>
</table>

3.3.2 Course level

At the CMDL strand Start-Up Workshop, representatives of each of the ‘mini-projects’ were invited to define the indicators and success criteria for their own courses. The evaluation emphasis here was on the transnational courses, which represented the area of greatest innovation in this project strand. Fig 3.7 below summarises the topics of each course and issues raised.

\(^3\) Two additional national courses were organised by the CISL as part of its mainstreaming activities within the project
<table>
<thead>
<tr>
<th><strong>Title/objective</strong></th>
<th><strong>Target Audience</strong></th>
<th><strong>Distance Phase</strong></th>
<th><strong>Positive outcomes</strong></th>
<th><strong>Key Issues raised/lessons learned</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CISL-CFDT</strong></td>
<td>New competencies for professional and managerial staff in the new economy</td>
<td>Professional staff active in their unions</td>
<td>3 tasks (a 4&lt;sup&gt;th&lt;/sup&gt; task 'online discussion' was omitted due to lack of time): Individual Icebreaker + 2 group tasks; 2 national groups + 1 transnational</td>
<td>Transnational knowledge sharing; Blended mode learning; Training and research helps organisations to develop new ideas/projects.</td>
</tr>
<tr>
<td><strong>CFDT-CC.OO</strong></td>
<td>Using Information Society Tools for European Trade Union Training</td>
<td>National and sectoral trade unionists with responsibility for trade union training and international affairs.</td>
<td>4 working groups (2 by language &amp; 2 subject)</td>
<td>4 training plans developed; Co-operation between partner organisations; development of organisations’ knowledge of CMDL methods &amp; content</td>
</tr>
<tr>
<td><strong>CGIL-CC.OO</strong></td>
<td>Trade union representatives in negotiating vocational training - activities and competences</td>
<td>Officers dealing with bargaining issues relating to vocational training</td>
<td>National groups 1 individual phase (information gathering – establish document repository); 1 discussion phase</td>
<td>Archive of documents relating to vocational training nationally; Production of training module on the topic; Transnational exchange</td>
</tr>
<tr>
<td><strong>CGTP-UGTE</strong></td>
<td>Trade Unions and the Challenges of the New Economy</td>
<td>Trade unionists</td>
<td>4 mixed groups, devised own work programmes in producing cases; Weekly chats; Study visit</td>
<td>Document on new economy; Training materials on 4 case studies</td>
</tr>
<tr>
<td>Title/objective</td>
<td>Target Audience</td>
<td>Distance Phase</td>
<td>Positive outcomes</td>
<td>Key Issues raised/lessons learned</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------</td>
<td>----------------</td>
<td>------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>LOS-NNF</td>
<td>Union representatives in food industry working in specified MNCs</td>
<td>2 company-based work groups; 9 activities – individual work &amp; discuss in groups &amp; course confederations</td>
<td>-</td>
<td>Recruitment of participants; Participants’ time (online &amp; organising face-to-face)</td>
</tr>
<tr>
<td>ÖGB-CGIL</td>
<td>Trade union employees &amp; reps; workplace reps</td>
<td>2 language groups (create national e-learning scripts)</td>
<td>2 storyboards for national courses</td>
<td>Language (including trainer-trainer communication); Online motivation; Distance phase organised as working groups rather than distance learning;</td>
</tr>
<tr>
<td>TUC-LOD</td>
<td>Experienced union representatives</td>
<td>Three phases: 1 - individual profiles &amp; icebreaker; 2 – 4 groups (2 UK, 2 DK) investigating national models of social partnership; 3 – 3 groups (1DK, 2 mixed) produce models</td>
<td>Participants intention to continue working beyond the course; co-operation between partner organisations</td>
<td>Language; Differences in industrial relations systems; Technological (firewalls); Participant motivation</td>
</tr>
</tbody>
</table>

* This course not completed by Evaluation Workshop, so final outcomes are not reported
Trainers were invited to define qualitative and quantitative indicators and success criteria for their courses. The criteria are explained below, and summarised for each course in Fig 3.8 below. The criteria were phrased differently and for simplicity of presentation have been grouped together here under common headings.

Quantitative criteria

- residential participation (>=80% of participants attending both residential workshops). All courses fully satisfied this criterion

- online participation (>= 80% participants connecting at least weekly during the course). The data by which this criterion might be assessed are not readily available from the FirstClass server. Consequently, the criterion applied has been more qualitative, relying on a combination of messages posted by participants and trainer/participant comments. The criterion has been said to be ‘Partially’ fulfilled where there has been significant use of the conferencing system during the learning phase, but trainers and/or participants have reported disappointment with the levels. This criterion has been said to be ‘Minimally’ satisfied where trainers have reported very low levels of online activity. No trainers reported being fully satisfied with the levels of online interaction

Qualitative criteria

One criterion not included here is that learners should develop their knowledge of the subject, since there is no way of assessing this from the data collected. Participant satisfaction with outputs and methods suggest that participants did, in general, develop their knowledge in the areas intended. In some cases, it is not clear, either from the survey data (owing to low response rates from some course participants) or from the qualitative data, whether a criterion has been satisfied. In these cases, no estimate is made.

- Participants complete online tasks: trainers were asked to rate their agreement with the statement that participants had completed online tasks to a high standard. Both trainers for three courses agreed or agreed strongly; in one case trainers disagreed and in two cases there was insufficient data (in one case, only one trainer responded to the question as ‘unsure’)

- Participant satisfaction with course products: participants were asked to rate agreement with the statement that they expected to use materials produced during the course in their future trade union work. For three courses where there was sufficient data from participant feedback, all reported that most participants ‘agreed’ or ‘agreed strongly’ with the statement. In courses with insufficient participant responses, use was made of trainer reports and ratings of the quality of course outputs

- Participant satisfaction with joint working: participants were asked to rate their collaboration both with partners from their own country and from the partner country, and during both the face-to-face and online phases. Where there was insufficient data, this was supplemented by similar trainer ratings of the intensity of the collaboration. A general picture emerged that participants worked more intensely with other participants from their own country than the partner country, and this was substantially more pronounced during the distance phase (reflecting both the organisation of some online working in national groups, and the difficulties of language)
Participants value transnational co-operation: from the same questions as the preceding criteria, as well as from qualitative responses both from trainers and participants, despite difficulties that may have been encountered, participants were very appreciative of the opportunity to work transnationally. Participants in the courses rated as ‘partially’ meeting this criterion reflect comments from some participants that while this transnational working had been appreciated, it might have been more valuable to have collaborated with participants from a country where salient aspects of the industrial relations system were more like their own.

### Fig 3.8 Summary of Transnational CMDL criteria

<table>
<thead>
<tr>
<th></th>
<th>CFDT-CC.OO.</th>
<th>CGIL-CC.OO.</th>
<th>CGTP-UGT</th>
<th>CISL-CFDT</th>
<th>LOS-FNV</th>
<th>ÖGB-CGIL</th>
<th>TUC-LOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in both residential phases</td>
<td>Fully</td>
<td>Fully</td>
<td>Fully</td>
<td>Fully</td>
<td>Fully</td>
<td>Fully</td>
<td>Fully</td>
</tr>
<tr>
<td>Participants connect to the conference system</td>
<td>Minimally</td>
<td>Partially</td>
<td>Partially</td>
<td>Partially</td>
<td>Partially</td>
<td>Partially</td>
<td>Partially</td>
</tr>
<tr>
<td>Participants complete tasks requested of them during distance phase</td>
<td>-3</td>
<td>Fully</td>
<td>Not satisfied</td>
<td>Partially</td>
<td>-</td>
<td>Fully</td>
<td>Fully</td>
</tr>
<tr>
<td>Participants satisfied with course products</td>
<td>Fully</td>
<td>Fully</td>
<td>Fully</td>
<td>Fully</td>
<td>-</td>
<td>Fully</td>
<td>Fully</td>
</tr>
<tr>
<td>Participants satisfied with joint working</td>
<td>Partially</td>
<td>Partially</td>
<td>Partially</td>
<td>Partially</td>
<td>Partially</td>
<td>Partially</td>
<td>Partially</td>
</tr>
<tr>
<td>Participants value transnational co-operation</td>
<td>Fully</td>
<td>Fully</td>
<td>Fully</td>
<td>Partially</td>
<td>Fully</td>
<td>Fully</td>
<td>Partially</td>
</tr>
</tbody>
</table>

### 3.3.3 Issues raised

The overall picture of the transnational courses is one of effective transnational working during the face-to-face sessions with widespread appreciation of the value of the transnational elements of the courses among participants. Similarly, trainers on several courses noted the value of working with trainers from another country and the relationships these developed between organisations. The distance phases were more mixed.

**Language**: language was widely reported as a difficulty during the distance phases. Several courses organised the group working along linguistic lines (e.g. monolingual groups, mixed groups for those with relevant languages). In some cases, it may be more appropriate to organise mixed groups working in a third, vehicular, language (in most cases English or French) as suggested by trainers on one course. It is particularly important that the trainers on a course have a shared working language.

**Maintaining motivation online**: difficulties in maintaining motivation during the online phase were widely reported by trainers. Trainers noted several contributory factors including: competing demands on participants’ time, differences in the legal or industrial relations conditions in partner countries limiting the value of cross-national working and technological difficulties (including the different ‘technological cultures’ encountered in some courses).

---

One trainer responded, stating that they were ‘unsure’ if the tasks had been completed to a high standard.
Technology: the evidence on participants’ use of technology is slightly conflicting. 76% of respondents reported ‘agreeing’ or ‘agreeing strongly’ that FirstClass was easy to use on their course. However, trainers reported technical difficulties on four of the courses. Difficulties with firewalls were identified as a specific issue. Other explanations may relate to the effectiveness of FirstClass training for participants on particular courses, or participants’ wider ICT skills (as reported in the Networking Strand). In some cases there is clear evidence of FirstClass either being supplemented by other communications media or for some participants, being replaced by e-mail. Trainers on one course reported feeling that they needed greater FirstClass skills.

A number of other issues were raised, and are discussed under CMDL in section 4 ‘Overarching issues’ below.

3.4 Web portals strand indicators

This strand was made up of three activities:

- A five-day international workshop “Developing trade union Web portals”, organised by SAK
- Five five-day training activities “Using Web portals on industrial change”, organised by DGB-Bildungswerk
- A project web site, implemented by ETUCO

Performance is summarised in Table 3.9 below. The overall number of participants in these activities exceeded the target by 17%.

<table>
<thead>
<tr>
<th>Table 3.9 – Web portal strand activities</th>
<th>Strand target</th>
<th>Achieved</th>
<th>Target participants</th>
<th>Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>International workshop</td>
<td>1</td>
<td>1</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Training activities</td>
<td>5</td>
<td>5</td>
<td>75</td>
<td>96</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>6</td>
<td>90</td>
<td>105</td>
</tr>
</tbody>
</table>

The project web site was operated throughout the project by ETUCO, and is available at: http://www.etuc.org/ETUCO/en/projects/Dialog_on/default.cfm
4 Overarching themes

4.1 Overview

Before discussing particular themes raised in the more innovative activities in the project, it is worth highlighting the complexity and difficulty of what the project has sought to achieve. Establishing viable computer-mediated collaboration is a difficult task, as is well documented in the research literature. DIALOG ON has sought to develop collaboration among trade unionists, where the need for increased transnational collaboration has been widely acknowledged, but where the practical obstacles remain formidable. The project has confronted constraints such as: language problems, organisational and cultural differences, variable ICT expertise, and high turnover of key staff. It has nevertheless made substantial progress and a number of lessons may be learned. The following section discusses key areas, and makes recommendations for ways of developing further work in this area.

4.2 Language

Problems of language permeated the project’s transnational online activities. While in some activities it presented less of an issue than others it remained problematic throughout. The inclusion of online translation machines has proved to be only modestly helpful: the quality of publicly available translation engines is too poor and participants do not appear to have developed habits of use. Late in the project (too late for effective evaluation), a trial online translation service was set up, with a human translator. This may offer a way forward for the future. Higher-quality proprietary translation machines are also available, though their usefulness in a context such as those here is not clear.

It seems unlikely that in the near future there will be a single technological solution to this problem. It is more likely that organisational and pedagogic designs of future networks will continue to need to pay explicit attention to this in future activities, finding ways of working around or within the particular language constraints. Since ‘formal’ teaching materials will often be translated, the problems are most prominent in group working online with the emphasis on communications among participants. Some examples have emerged in the project, such as:

- identification of bilingual ‘local’ translators among course participants working in otherwise monolingual working groups
- preparation of ‘national’ contributions by mother tongue speakers with professional translation of finished outputs (reports, tools, presentations etc)
- selective translation of important documentation

Using techniques like these will always be a compromise, perhaps sometimes conflicting with trade union values of participation and access. It may, though, offer a more realistic way to design transnational working.
A further language-related issue reported by two animators in the Networking Strand is the difference in participants’ confidence in their spoken and written use of second or third languages. In general, participants are more concerned about their own language skills ability when they are using written rather than spoken language. Almost all participants, in both strands, self-reported greater confidence in their spoken rather than written language skills. This may be for two reasons. Firstly, informally acquired language skills may result in greater oral skills. Secondly, unlike text-based communications, spoken language doesn’t leave a record of speakers’ mistakes. ICT applications that support voice communications (e.g. video/audio conferencing, instant messaging applications) may offer complementary communications channels that support oral communications.

**Recommendations:**

- language constraints
- conferencing

### 4.3 What do we mean by network?

Some of the assumptions about what is meant by the term ‘network’ that were implicit in the original project design can now be refined for future activities. The term ‘network’ has been used to refer to organisational networks, though without distinguishing between the different design and support requirements of different types of network. Simultaneously, the main project activities were separated into a ‘computer mediated distance learning’ and ‘networking’ strands, creating distinction between two broad classes of network that may have limited some kinds of information sharing.

#### 4.3.1 CMDL and organisational networking

CMDL as implemented in the project, using methods of online collaborative learning and working, is a form of networking, though with particular attributes. Most clearly, the achievement of predefined learning outcomes should be the central defining feature of a network established in an e-learning context. Associated with these objectives are particular issues of method and associated trainer skills, and trainers highlighted the need to keep pedagogic issues in the foreground. However, networks which incorporate e-learning/CMDL methods may, simultaneously, have other objectives. This may be particularly true when courses aim to relate the content and methods of the course closely to participants’ trade union work – an issue raised in trainer feedback.

In two of the CMDL courses, participants expressed a desire to continue collaborating online beyond the life of the project and in one case created plans and expectations for this. While, in reality, this appears not to have happened, it suggests that e-learning might usefully be seen in some contexts as a particular phase in the life of particular types of organisational network.

A second reason for reconsidering the distinction between CMDL and organisational networks is that separating the experiences of learners and trainers/animators may limit the identification of important commonalities across different types of networks. As argued below, some of the major difficulties in the two strands are closely related, as may be the ways of addressing them.
4.3.2 Distinguishing types of organisational network

Within the networking strand, we can identify three different types of network: the virtual team (a relatively small, well defined, target population collaborating on well defined tasks as for example, in the ETUCE HERC network), virtual community (a larger, more loosely potential population of people exchanging information on topics of shared interest as for example in the UNI-Europa Graphical network); and a more specific type of EWC co-ordination network (e.g. the EFBWW EWC network) which aims to bring together a relatively well defined population carrying out broadly similar functions to exchange and generate particular types of information. These types of network are likely to have different structures, patterns of information flow, participants and organisational relations. The differences between these types of networks are blurred and the examples given may also display some of the features of other types of network. It is useful to distinguish between them, better to highlight the different requirements in sustaining each type of network. These different types of network will require different types of network design (understood broadly to include, for example, the design and allocation of tasks, development of policies, training needs, as well as technology design). For example, a virtual team of organisational representatives preparing an agreed statement on a European policy issue will be composed differently and require different working practices to a community of interest open to a broader audience of people with wider shared interests in issues of a particular industrial sector. This diversity of types of network has implications for technologies, training and the role of ‘animators’ as discussed below. Characteristics and issues associated with the three types of network include:

- **Virtual teams**: The Quality in Education and HERC networks (and perhaps the ETUCE Chief Negotiators) might be characterised as ‘virtual teams’. Both were small in the sense that the total target population of the network is small (fewer than 30 participants). Participants were nominated by their organisations to speak on their behalf while working on particular tasks (e.g. preparation of reports, contributions to European policy discussions). While additional participants were allowed ‘observer’ status to read conferences, the boundaries of the team were well defined. Importantly the networks were based closely on organisational activities that predated DIALOG ON, through which participants met together and developed a shared history of collaboration and had specific tasks to complete (such as the preparation of reports for presentation at conferences). Particular issues for the design of this type of network include the skills, knowledge and representativity of participants, and people and technologies to complete specified tasks

- **Virtual community**: a virtual community is a more open form of organisation than a virtual team, which seeks to attract participants to itself rather than have them participate on the basis of their formal ability to represent their organisation. It is likely to be larger than a virtual team and may be formed around common interests (‘Community of Interest’) rather than specific tasks (as in a virtual team) or practice (as in a ‘Community of Practice’). Communication may be less structured and formal, and so may require a ‘critical mass’ of participation before becoming self-sustaining. The Transport, EFBWW Health & Safety and UNI-Europa Graphical networks might be characterised as types of virtual community of people sharing broad interests in their respective fields. Particular issues in the design of these type of networks are the promotion of the network to the target audience, ease of participation and creation of a social space
• **EWC Co-ordination**: the EMCEF EWC network and the EFBWW EWC network specifically aimed to gather and exchange information about current developments in European Works Councils in the respective sectors, in the context of the rapid growth in the number of EWC agreements reached. These, relatively recent, developments have placed strains on the ability of European Industry Federations to handle the quantity of information, particularly in cases where trade union links in many EWCs may themselves not be well-established. These networks are characterised by potentially large numbers of participants, many of whom are themselves working in relatively novel contexts. The challenges of instituting new communication channels in these settings are great, particularly where some potential participants are already becoming disillusioned by the experience of European Works Councils (as reported by the animator of one network). Particular issues in the design of this type of network are ease of participation and the design of tasks which can bring short-term (as well as longer-term) benefits to participants at the company and national levels, as well as the European level.

These types of network do not exhaust the possibilities of virtual networking and it is highly likely that additional types of networks will emerge in later initiatives (e.g. cross-sectoral issue networks or cross-border networks addressing issues particular to a particular sub-region).

**Recommendations:**

- clarify and refine their requirements and expectations at an earlier stage, prior to nominating animators for training
- future animator training events, building on (but not restricted to) the three types of network identified here

### 4.4 Designing learning and organisational networks to motivate online participation

Despite being addressed as an issue in the project training, in both the CMDL and networking strands, the issue of motivation during the online activities was a major concern of trainers and animators. In both strands, the levels and nature of online activity were frequently disappointing both to trainers/animators and some participants. In both strands the conferencing was rarely used for the in-depth discussion (rather than the coordination of offline or individual activities). In both strands, levels of online communication frequently tailed off after face-to-face events. Participants in both strands frequently reported conflicting time pressures from their work, trade union or other commitments. Several trainers in the CMDL strand identified a need for greater precision in the planning of online activities, in particular setting timescales. In discussions at the evaluation workshop, trainers identified the need to fit the CMDL learning activities closely to participants’ trade union work. Similarly, several network participants reported disappointment with lack of participation in the network. These comments suggest that the online activities as designed in both strands did not fully engage their audiences.

Some of the problems reported by participants are well-known from research into computer-supported co-operative working (CSCW) and e-learning can usefully be incorporated into future training activities. For example, the distribution among

---

*S Some of the activities of the Transport network might also be described as EWC co-ordination though the overall network was somewhat broader.*
participants of the effort needed to sustain a network and the benefits gained through participation need to be aligned. In the case of networks designed to gather information of use at the European level, the benefits to participants at national or company levels that have the information may appear to be limited (or at least, are only realised far in the future).

**Recommendation:**

- design taking account of both learning and organisational-type networks
**4.5 The role of the network animator**

As animators have gained experience of their role, it has become clear that the task role draws on a wider set of skills and knowledge than had originally been anticipated. Activities observed in the networks are listed in Fig 4.1, and will have implications for the content of future animator training.

<table>
<thead>
<tr>
<th>Fig. 4.1 Aspects of animation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ambassador</strong></td>
</tr>
<tr>
<td><strong>Archivist</strong></td>
</tr>
<tr>
<td><strong>Chair</strong></td>
</tr>
<tr>
<td><strong>Host</strong></td>
</tr>
<tr>
<td><strong>Librarian</strong></td>
</tr>
<tr>
<td><strong>Support</strong></td>
</tr>
<tr>
<td><strong>Weaver</strong></td>
</tr>
</tbody>
</table>

The original project conception had two animators: one more hands-on, facilitating the online discussion, and a second more political or organisational role. The diversity of the role emphasises that a single person will frequently not have all of the skills and knowledge required for effective animation (especially in multilingual networks), suggesting that small teams might be a more appropriate form of organisation, particularly for the virtual community and co-ordination type of network.

As noted elsewhere, the high turnover during the life of the project of staff working at the European level created difficulties for most of the networks. Consequently, training for animators needs to be available during the life of the project allowing replacements to be trained in good time. This poses, however, substantial logistical difficulties for training organised as residential or mixed mode courses. Consideration might usefully be given to alternative training methods such as self-study and mentoring approaches.

**Recommendation:**

- training activities, based on but not restricted to, aspects such as those identified in this project
- replacement of animators during life of networks
4.6 CMDL Trainers

Trainers in the CMDL strand themselves participated in a mixed mode ‘Training Trainers’ course which aimed to prepare them for their role in planning and delivering the subsequent national and transnational courses. The Training Trainers course covered pedagogical and technological issues associated particularly with the distance phase of the course. All responding trainers either ‘Agreed’ or ‘Agreed Strongly’ that the training prepared them well for training on their respective courses (see Fig 4.2 below).

Nevertheless qualitative feedback from trainers suggests a number of areas in which understanding of, and preparation for, transnational CMDL events might be further developed or reinforced:

- **Importance of clear organisation of distance phase**: clear organisation of tasks of the distance phase is essential. In particular, several trainers reported being unclear about how to determine optimum lengths for the distance phases of courses;

- **Fitting methods to content**: some reported that they would have appreciated greater emphasis on fitting alternative CMDL methods to the demands of particular learning content;

- **Project management training for trainers**: one limitation on trainers’ ability to be flexible in the design and delivery of their courses may have been a lack of awareness of the freedoms and constraints of the project funding. This may be included in future ‘Training Trainers’ programmes.

One aspect of this project noted by several trainers was that the project proposed a single model of mixed-mode learning for all courses. While this undoubtedly had the important benefits of using a tested model developed in earlier projects, and of simplifying the trainer training and overall project organisation and management, it had two potentially negative consequences. Firstly it limited the range of approaches to transnational CMDL from which trainers could learn, and secondly, the methods presented may not have been optimal for all combinations of learning content and target audiences.

**Recommendations:**

- e-learning
- during the distance phase
4.6.1 FirstClass

All of the planned electronic transnational communications activities in the project were based on the ETUCO FirstClass server. FirstClass is a proprietary conferencing system accessible either via a Web interface or using the FirstClass client. The strengths of FirstClass include flexibility in the management of conferences and simple information repositories, and the availability of the interfaces in a range of European languages. Standardisation on a single technological platform for transnational activities circumvented problems of incompatibilities between systems already in use in particular national settings. Though for national courses in the CMDL strand, partner organisations were free to use the various communications platforms in use nationally.

Course trainers and network animators were trained in using FirstClass as part of the training trainers activities. This included training in the ‘management’ functions of the software (such as the creation of new conferences and folders) as well as discussion of how these facilities might be used in networks and courses.

Training in the use of FirstClass for participants was provided in the initial seminars of all networks and (with the exception of one course, due to unavoidable external circumstances) all transnational CMDL courses. Client software was made available to participants via CD-ROM and the project web site, and paper-based FirstClass training materials were provided in the project languages. A Web-based online training package was also made available, though only in English. The training primarily addressed use of the FirstClass client (which, for some animator/trainer level functions is essential). A dedicated ‘Help’ conference was created for the project, with expert support, to help users to resolve a range of issues which emerged in their use of the system.

Feedback (in evaluation questionnaires, interviews and reports) from most course and network participants and trainers indicated that in general FirstClass was easy to use and that the client was easy to install (despite a majority of participants previously reporting low levels of confidence in their ability to install software). The main recurrent problem with the platform occurred as participants sought to use the client to access the server via organisational firewalls. Resolving this problem requires the involvement of local network managers. This could be at best time-consuming to resolve, and at worst irresolvable where access conflicted with local organisational security policies. This was a more significant difficulty for networks, where more people accessed the server from work settings, when compared with the CMDL courses (where a larger proportion of participants accessed the system from home). The problem could be circumvented by using the Web interface.

Recommendation:
• To minimise access problems, future projects should make use of systems based on standard internet applications (e.g. Web, e-mail)

7 The FirstClass client uses a non-standard TCP/IP port, disabled on most organisational firewalls.
8 A new, more flexible, web interface to FirstClass was released by the manufacturers and installed during the life of the project.
4.6.2 Other communications technologies

While FirstClass is well suited to some types of activity, it is less clear that it is appropriate across the range of possible networks. One network animator, for example, reported that participants had told him that they did not want to use a system other than their normal e-mail. In CMDL courses, participants reported using e-mail, telephone and in one case, ‘instant messenger’ software as well (or even instead of) FirstClass. In networks, there is one example of information initially circulated on FirstClass being moved to an extranet. Where communication levels are low or become intense in response to unpredictable, external events (such as industrial disputes) technologies such as e-mail and mailing lists, which require less investment of time and effort from participants may be more appropriate. Similarly, where real-time informal communication is important technologies such as video conferencing and ‘instant messaging’ might be appropriate (as, for example, in allowing people to use spoken as well as written communication in a second or third language). More generally, a more refined view of networks will require a broader technological toolkit to support different types of online tasks and different user groups.

It is questionable whether a single technological infrastructure will be appropriate for the range of network and learning activities covered within the project. The rapid spread of broadband infrastructures in much of Europe will also allow technologies like videoconferencing to be used rather more widely (and cheaply) than has been the case.

Recommendation:

- make use of a wider range of technologies, both in CMDL and organisational networking strands, seeking a closer fit between the participants involved, the tasks and activities they are doing, and the technologies used