Final Evaluation of the

eTEN Programme

RAND Europe

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RAND EUROPE

Preface

This is the final report of the evaluation undertaken by RAND Europe during 2007 following the end of the main operational period of the eTEN programme; it particularly responds to the requirement of Annexe 19 of the regulation governing eTEN for a 'report on the experience gained with the mechanisms and provisions laid down in Annexe 4' of the regulations.

An interim evaluation was conducted by Ramboll/IDATE in 2004.We have not revisited those areas it was able to cover fully, but we have examined those issues about which it was then too early (i.e. in 2004) to come to a view, and we have also considered the extent to which its recommendations were followed.

We have reviewed the extensive monitoring and evaluation material, and programme documentation and outputs; and we have supplemented this existing information by undertaking key informant interviews with stakeholder representatives. We present here our findings concerning the use of the implementation mechanisms; on the efficiency of the programme's operation and its effectiveness in producing results and impacts; and on its policy relevance and potential sustainability. The longer term impacts, which it is still too early to foresee with confidence, will be the subject of continuing EC monitoring. A further phase of the evaluation will examine additional evidence, especially in connection with projects commissioned towards the end of the Programme.

Our key findings are summarised in the pages immediately following this preface; the findings appear in full at the end of the main body of the report.

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Summary of Key Findings

RAND Europe has undertaken a final evaluation of the eTEN programme. This programme nominally finished at the end of 2006 although some project activities contracted late in its life continue. Key findings of the evaluation are as follows:-

Overall success of the Programme

- eTEN was ultimately a well run and, in its later stages, successful programme, which contributed to the attainment of its over-arching objectives. This finding is, however, qualified in two ways. Success was not achieved without difficulties, particularly in the early years of the programme. Additionally the extent of its success is not quantifiable – in part because its impacts are not yet fully visible and in part because its overarching objectives were expressed in qualitative terms without specific measurable success criteria.

Programme Implementation Mechanisms

- Funding mechanisms other than grant aid were not utilised: this is unsurprising given the modest size of the projects, and we do not consider that this significantly affected the programme's performance. Linkage to Regional Development Funds was weak, despite the apparent scope for benefits.

- The Market Validation (MV) project mechanism was initially over-utilised (in part because of its more favourable financial arrangements for participants); this was remedied in the later stages of the programme. Many MV projects commissioned before the reorientation did not result in any visible subsequent deployment; this situation also improved in the later stages of the programme.

- The Initial Deployment (ID) project mechanism came on stream late, but worked well, particularly following the much-delayed implementation of the 30% cap on overall support as a proportion of total cost. Some promising deployments are now in progress and prospect, including some originating from earlier MV projects.

- The funding contracts allowed for insufficient flexibility. Project reviews were consequently limited in their ability to either direct or sanction necessary major changes of direction during project implementation. In interviews, some project managers reported an impression that they had no realistic means of modifying this situation even when the problem had been recognised.

Efficiency of Programme Management

- From 2003 no major management issues arose and the standards of management processes; fairness, openness and transparency, and efficiency of day-to-day management were excellent.

- The operational procedures for preparing Work Programmes and Calls, their accompanying documentation and the receipt and evaluation of proposals improved continuously throughout the programme. Significant initial problems (particularly with proposal evaluation) were overcome and these mechanisms were subsequently satisfactory and, by the end of the programme, became excellent.

- Objective formulation and its reflection in work programme creation were sound and appropriate: we found no reason to criticise the evolution of objectives and indeed consider this responsiveness to change in the programme's external market (and policy) environment a very positive feature.

- The process leading to contracting projects (a sequence consisting of selection, credential checking, and negotiation of the technical annexes to contracts) took too long. This had been noted as a problem by the Intermediate Evaluation, and continued thereafter. In addition, project time-scales were long relative to private-sector counterparts and the dynamics of fast-moving sectors. This, together with the delays in contracting projects, frequently resulted in a very long 'time to market', which is likely to have worked against successful deployments and reduced their potential impacts.

Effectiveness, Achievements and Impacts

- The programme made considerable progress in involving stakeholders from New Member States, SMEs and public bodies. Their participation strongly favours the further deployment and uptake of project outputs at a pan-European level and the competitive health of markets for these and related services.

- Activities in the latter stage of the programme promise good impacts through the formation of sector-based value chain communities (especially in the public sector). The emphasis placed in the latter stages of activity on inclusion in projects of the full value chain including 'sustaining partners' and 'sustaining revenue streams' was fully validated and represents an important lesson for future programmes.

Fulfilment of Programme Objectives

- The later stages of the programme we find to have added real value through actions seeding and/or exemplifying structural change and also through placing actual deployment at the centre of policy development. The programme may thus reasonably be expected to produce strong overall impacts by stimulating new areas of activity and demonstrating the ways in which ICTs may contribute to effective policy relating to innovation and the Lisbon Agenda and i2010 objectives.

Sustainability of Activities

- Long-term sustainability of activities is difficult to assess at this stage. However, the involvement of the whole value chain (adopted in the later and more productive stages of the programme), and the specific example provided by some of the projects that have proceeded into wider deployment via these value chains, strongly suggests a positive prognosis.

Contents

1 Background – eTEN's operation in a rapidly evolving environment

During the years 2001-2006, eTEN supported the deployment of trans-European electronic services (eServices), which included cross-border services and services implemented in several countries. The main thrust was to widen deployment of such eServices including adaptation of services that had proved their success in one part of the EU to allow them to be implemented in another. During the life of the programme, the rapid evolution in ICTs, and users' expectations of them led to considerable change in the tactical objectives of the programme as expressed in the annual Work Programmes.

eTEN is one of a group of Trans-European Network programmes (TENs) directly mandated under the Treaty establishing the European Community (articles 154, 155 and 156), which states that the "Community shall contribute to the establishment and development of trans-European networks in the areas of transport, telecommunications and energy infrastructures". There were two elements to its legal base: the Financial Regulation (Council Regulation No 2236/95/EC) covered all three TENs and set out the financial instruments and measures applicable to these Programmes; and the guidelines (Decision No 1336/97/EC), which set out the specific objectives and priorities of the eTEN action per se. Its overall rationale, in common with other TENs, was to provide the benefits of new and increased economic activity through strengthening territorial cohesion, most particularly by linking out-lying and less favoured regions to the more central areas, but also through a general deepening of the linkages among the people, enterprises and institutions of Europe.

The eTEN programme overall objectives are defined in the Programme Guidelines published as a decision of the European Parliament and Council in 2002:[1]

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[1] From Annex DECISION No 1376/2002/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 12 July 2002.

1. Trans-European telecommunications networks will contribute to the introduction of innovative trans-European services in the general interest. The services will contribute to the development of the information society in terms of growth, employment, social cohesion and participation for all in the knowledge-based economy.

2. TEN-Telecom supports the technical and economic feasibility, validation and deployment of services. Services must be innovative, trans-European and based on proven technology:

- a service may be launched in separate Member States with appropriate adaptation in each State,

- a service that has already been deployed in a single Member State without support under this programme may be extended to other Member States,

- a service of demonstrably trans-European interest may be implemented in a single Member State.

3. As services should be considered to be trans-European, the participation of organisations from more than one Member State and implementation in more than one Member State, though not required, will be encouraged.

4. In this context, projects of common interest shall be identified on the basis of their operational capability to support the objectives laid down in this Decision.

5. The projects of common interest described below shall be on three levels, forming a coherent structure:

(i) Applications

Applications serve user needs, taking into account cultural and linguistic differences and the requirements for accessibility, in particular for disabled people. Where it is applicable, they shall accommodate the specific needs of less developed or less populated regions. They shall use the potential of broadband, mobile and other communications networks as appropriate.

(ii) Generic Services

Generic Services shall support applications' common requirements by providing common tools for the development and implementation of new applications based on interoperable standards. They shall provide services for the transfer and integrity of data across networks, including broadband and mobile communication networks.

(iii) Interconnection and interoperability of networks

Support will be provided for the interconnection, interoperability and security of networks underpinning the operation of specific public interest applications and services.

eTEN operated in a domain (ICT) that was (and is) evolving extraordinarily quickly; the specific programme objectives required to serve its overall policy rationale

themselves had to evolve quickly. Other elements of eTEN's background context also changed appreciably during its life: the EU itself expanded very significantly and the refocusing of its strategic objectives (e.g. the Lisbon Strategy and its subsequent revision and the i2010 policy framework) directly affected the evolution of eTEN objectives. Thus the objectives of the programme shifted appreciably (within a consistent overall rationale) through the period of its operation; this is reflected in the progressive changes in annual Work Programmes, most strikingly in the eventual appearance of eInclusion as a specific action line.

We therefore look to the Work Programme and the mix of implementation mechanisms used for reflection of those changes. A summary of the changes and indicative systemic responses is given in **Table 1** below.

Table 1: Summary of key context changes and systemic eTEN responses

Change	Systemic Response
Broadband penetration, ICT commoditisation, telecommunications liberalisation and internet ubiquity	Migration from technologies to services
Mobile penetration, SMS, texting etc	Increasing support for mobile services
Bursting of dot.com bubble and perceived capital market tightness	Change in maximum funding level
EU Expansion	Corresponding enlargement of eTEN
Lisbon Strategy re-focussing	Emphasis on demand-led activity
i2010 strategy re-focussing	Increased emphasis on 3 "I" s (particularly e-Inclusion as a separate action line)
Perceived lag of public sector ICT take-up (Kok report et al)	Top-down approach to public sector ICT themes
General maturing of the ICT sector	Increasing focus on deployment, collaborative engagement of public authorities, SMEs, trans-European dimension
ICT and media convergence	Increasing support for converged, interoperable services

This list indicates *some* major areas of evaluation interest; it does not cover all changes or responses and is not intended to argue that the systemic responses noted were necessarily optimal or sufficient.

To further put the changes in perspective, the following timeline summarises key events in programme evolution. The reorientation of the project Guidelines was implemented in 2002. The process of change and restructuring continued through 2003 with appointment of a new management team (in the eTEN Unit itself) The 2005 implementation of the reoriented financial regulation lifted the co-funding ceiling on Initial Deployment projects. This evaluation concentrates primarily on the period following the appointment of the new Head of Unit in 2003. Where the term "reorientation" or "restructuring" is used without qualification, it is to be understood in this sense.

The pre-2003 period was evaluated in some depth in the Interim Evaluation of eTEN conducted by Rambøll and IDATE in 2004. We have taken careful note of the findings of that Interim Evaluation, and noted (where appropriate) actions taken in response, but we only otherwise revisited that prior evaluation where questions (such as those concerning long term impacts) had (necessarily) been left unanswered as that stage.
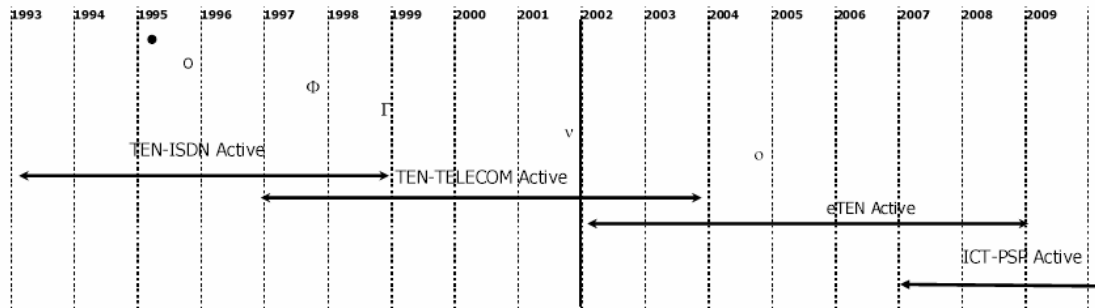
Figure 2: eTEN timeline

Key

• Council Decision on TEN-ISDN 9 Nov 1995 ('revised guidelines') 2717/95/EC

O Regulations for TEN-ISDN 24 Nov 1995 ('revised financial regulations') 2236/95/EC

Φ Council Decision establishing TEN-TELECOM 17 June 1997 ('guidelines') 1336/97/EC

Γ Regulations for TEN-TELECOM/eTEN ('financial regulations') 1655/99/EC

ν Council Decision on eTEN 12 July 2002 ('reorientation of guidelines') 1376/2002/EC

ο Regulations for eTEN 22 July 2005 ('reorientation of financial regulations') 1159/2002/EC

2002 watershed: new guidelines, new orientation, new management team.

2 Efficiency of the Implementation Mechanisms

We here report on the evaluation of the efficiency of the implementation mechanisms eTEN. We have reviewed the available project mechanisms and their corresponding financing arrangements, and considered the types of aid other than co-funding which were available in principle but not utilised in practice. We include under the heading of mechanisms the forms of contract used for co-funding.

2.1 Overall Findings re Funding Mechanisms (Project Types)

The Intermediate Evaluation by Rambøll and IDATE recommended replacing the distinction between market validation and initial deployment projects with multi-stage projects separated by decision 'gates' with conditional funding. At that time, there were many MV projects with no serious prospect of proceeding to deployment. This situation reflected a combination of factors: some early MV projects were 'research-bis' continuations of RTD activity, some consortia lacked key competencies (e.g. entrepreneurial skills, deployers, etc.), some projects concentrated on producing business plans that did not align with a sound and feasible business model, some lacked working prototypes and the financial structure of others rendered them ineligible for continuation funding under the 10% rule. However, this recommendation of the Interim Evaluation was not taken up, although similar approaches can now be seen in some Member States and the ICT-PSP. Interviews with management and external experts suggest that at the time of the reorientation it was seen as necessary to generate ID projects and actual deployments as soon as possible (given the limited remaining lifetime of the programme); that incumbent MV projects did not provide a sufficiently wide and deep pool on which to draw, and that the decision gate concept would have been difficult to reconcile within the legal basis of eTEN. We find the decision not to implement this recommendation – which was in any case ruled out by the legal base - to have been realistic in the circumstances. The incentive and selectivity objectives of the recommended procedure were successfully addressed through changed requirements (consortium composition and agreement, exploitation and enhanced dissemination plans, refocused themes, etc.). Indeed, some of the most successful projects in the latter phase found even initial deployment funding outside the programme, thereby freeing up resources for new initiatives. The balanced combination of MV and ID projects we find to have been both appropriate and, in light of pre-2003 experience, necessary.

2.2   Overall Findings re Financing Modalities

The Financial Regulation (Article 4) governing all the TEN programmes listed a range of financing modalities: grant co-financing; interest subsidies; loan guarantee fees; direct grants to investment; and risk-capital participation. In the event eTEN used only the first of these. Interviews with the management team revealed that these other modalities were seen – on one side or the other – as more appropriate to the larger up-front investments in physical capital assets associated with transport and energy TENs. Such other modalities also represented a considerable departure from the general DGINFSO culture, especially in view of the procedural and thematic similarities and shared or co-located personnel linking eTEN with e.g. the IST-RTD programme. In the event, attempts were made to involve sources of loan capital (e.g. the European Investment Bank/ European Investment Fund (EIB/EIF)) but the (public) service orientation and modest size of eTEN projects essentially excluded them from consideration. However, use of Regional Development Funds (RDF) could have magnified impacts. In this case, RDF objectives of supporting the transition to the Knowledge Society and to sustainable development could have been enhanced by participation in or continuation of eTEN projects to the benefit of both programmes.

2.3   Overall Findings re Contracts

Whatever the project type, there must necessarily be a contract between the project and the EC covering the conditions of funding. Interviews with programme management and external expert project reviewers identified a number of instances where in-progress project review revealed a need for realignment of the activities. This is always likely in practical operations such as market validation and/or new service deployment. Even the most commonplace of practical operations may be governed by contracts that provide for significant changes (e.g. in the design of a building in response to unexpected features found during the excavation of foundations). This is even more common in innovative and/or service-supporting contracts, which are generally flexible (or 'incomplete') to permit change or renegotiation as circumstances and knowledge change[2]. Standard contract forms are still used in such circumstances and appropriate financial control maintained by provisions for variations within the contract when supported by clearly specified evidence. The use in eTEN of contracts that did not provide for such variations consequently limited the ability of project reviews to either direct or sanction necessary major changes of direction during project implementation[3]. Project management believed that they had no realistic means of modifying this situation even when the problem had been recognised. We consider that both the form of contract used and difficulty of changing to a better form caused significant detriment to a small number of projects and thus, at least in some measure, to the programme as a whole.

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[2] A long time horizon also militates in favour of flexibility: eTEN projects typically lasted longer than analogous private sector ones.

[3] The issue identified by interviewees was not a need for extra funding but the ability to alter the precise use and distribution of approved funding.

2.4   The Different Project Types

The programme supported two primary project types:

- Market validation projects – funded up to 50% of allowable project cost up to a maximum of 10% of total investment cost; and

- Initial deployment projects – funded up to a maximum of 10% (later 30%) of total investment cost.

A third project type funded Supporting and Coordinating activities (SCAs). Under the original funding framework, market validation projects were intended to lead on to initial deployment projects and funding was capped at 10% of total cost. Thus, while a project which began as an ID project could be funded at 10%, an MV project could only use for its ID phase that proportion of 10% of total cost remaining after paying 50% of MV costs. Many pre-2002 MV projects were accepted on a funding basis that could not credibly be sustained into ID since the allowed funding available after completion of the MV phase would not come close to the minimum required to start ID. The 10% cap was more appropriate to physical infrastructure projects with large initial fixed capital investment and low marginal costs than to service delivery and soft infrastructure projects and was essentially a legacy of the sister TEN programmes. ID projects were only funded under the 30% cap following the 2005 Financial Regulation revision. The 10% funding limit magnified adverse selection and incentive effects; meagre co-funding was unlikely to attract projects with real prospect of success (and thus of alternate funding), while financial incentives during project life strongly favoured maximal expenditure during the MV phase and/or concentration on monetisable outputs. While the reorientation increased support for individual ID projects and the proportion of programme budget devoted to them it was nonetheless limited by this cap. It is too early today to clearly see the impact of the increased (30%) cap and in consequence meaningful comparison between the effects of the 10% and 30% levels must be deferred until it is possible to examine the apparent deterrent risks of the 10% cap on good proposals (particularly vis-à-vis the relatively high transaction costs and administrative requirements of eTEN funding), capital asset formation and risk capital financing. **Error! Reference source not found.** below summarises the split between MV and ID projects, based on the Call year. The data show the dominance of MV projects in the early phases of the Programme; in the immediate wake of the reorientation ID projects began to be commissioned to a significant degree, and by the end of the Programme they had become a major component.

Table 2**: Proportionate funding by Call year and project type**

	Initial deployment	*Market validation*	*Supporting*
1997	11.4%	88.6%	
1998		93.6%	6.4%
1999		100.0%	
2000	1.9%	98.1%	
2001	10.2%	89.8%	
2003	16.7%	81.8%	1.5%
2004	2.6%	94.4%	3.0%
2005	49.0%	51.0%	
2006	46.7%	53.3%	

The Nine Contracted Supporting and Coordinating Activities (SCA) included *inter alia*

- Support to the national contact points network including training of New Member States contact points to facilitate their contribution to consortium formation and proposal preparation and to disseminating and raising the profile of project results; and

- Support to the programme as a whole by promotion to wider constituencies of potential adopters and other stakeholders.

The eTEN programme, with the Management Committee decided in 2004 to discontinue the SCA activity, taking the view that this instrument could not guarantee relevant support.

Subsequently, some limited direct financial support was given by eTEN to 'top-down' expert groups with the intention of ensuring that activities to be proposed would have the assured support of key user groups (e.g. government agencies) and to improve alignment between objectives and proposals.

2.5   The different forms of community aid

According to Article 4, Clause 1 Community aid for projects may take one or several of the following forms:

a) *co-financing of studies related to projects, including preparatory, feasibility and evaluation studies, and other technical support measures for these studies. Community participation may in general not exceed 50 % of the total cost of a study. In exceptional, duly substantiated cases, at the initiative of the Commission and with the consent of the Member States concerned, Community participation may exceed the limit of 50 %;*

b) *subsidies of the interest on loans granted by the European Investment Bank or other public or private financial bodies. As a general rule, the duration of subsidy shall not exceed five years;*

c) *contributions towards fees for guarantees for loans from the European Investment Fund or other financial institutions;*

d) *direct grants to investments in duly justified cases;*

e) *risk-capital participation for investment funds or comparable financial undertakings with a priority focus on providing risk capital for trans-European network projects and involving substantial private-sector investment; such risk-capital participation shall not exceed 1 % of the budgetary resources under Article 18. In accordance with the procedure specified in Article 17, this limit may be increased up to 2 % as from 2003 in the light of a review, to be presented to the European Parliament and the Council by the Commission, of the functioning of this instrument. Further modalities of implementation of this risk-capital participation are laid down in the Annex. The participation may be made directly into the fund or comparable financial undertaking or into an appropriate coinvestment vehicle managed by the same fund managers;*

In the event, eTEN utilised only the co-financing possibilities of (a) above. This was clearly acceptable in terms of Clause 2 which says

The forms of Community aid referred to under points (a) to (e) shall be used selectively to take account of the specific characteristics of the various types of network involved and to ensure that such aid does not cause distortions of competition between undertakings in the sector concerned.

However, the total absence of any utilisation of (particularly) European Investment Bank (EIB) involvement is striking, the more so because of the possibility of combining EIB (or similar) assistance with co-financing as envisaged in section f of Clause 1 thus

Community assistance under points (a) to (e) shall be combined where appropriate, in order to maximise the stimulus provided by the budgetary resources deployed, which shall be used in the most economical way.

Clause 3 of Article 4 is specific to transport infrastructure, but Clause 4 has relevance to eTEN:-

The Commission shall specifically promote recourse to private sources of financing for projects funded under this Regulation where the multiplier effect of Community financial instruments can be maximised in public-private partnerships. Each case shall be examined individually by the Commission, with account taken where appropriate of a possible alternative financed solely with public resources.

The support of each Member State concerned shall be required for each project in accordance with the Treaty.

This modality was not utilised in eTEN with regard to large quasi-public sources of external finance, though venture capital access was emphasised at project level.

2.5.1 The unused forms of aid

The European Investment Fund (EIF) is the specialist risk capital arm of the European Investment Bank (EIB), with a specific remit to support the creation, growth and development of Small and Medium-sized Enterprises. Its tripartite shareholding includes the EIB, the European Union represented by the European Commission, and a number of European banks and financial institutions. It intervenes mainly by means of risk capital and guarantee instruments, either drawn from its own funds or within the framework of mandates entrusted to it by the EIB or the European Union.

The EIB has four financing instruments potentially available to eTEN projects:

1. the TENs investment fund – but this is only available for TEN-T and TEN-E;

2. the "innovation 2010 initiative" (i2i - see below), which is available for telecommunications - but only infrastructure;

3. the Structured Finance Facility whereby the EIB can assume a greater degree of credit risk in the financing of projects; and

4. a proposed TENs Guarantee Instrument. This instrument would assist the financability of TENs projects by assuming the traffic revenue ramp-up risk in the early years of the project. The guarantee instrument would be funded in equal amounts by the European Union and the EIB.

An evaluation of the EIB's involvement with TEN published in January 2007[4] makes no mention of telecommunications.

It is certainly not the case that the EIB is telecommunications averse: the i2i initiative "centres on three objectives paving the way for technological modernisation and the tailoring of human capital to the European economy of tomorrow. These objectives are:

*   Education and training

*   Research and development (including downstream development)

*   Information and communications technology (ICT) networks, including audiovisual"

During 2002-2006, loans advanced under i2i reached €35.9 billion. The telecommunications branch of its predecessor ("innovation 2002") funded

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[4] http://www.eib.org/publications/publication.asp?publ=286

infrastructure almost exclusively; this physical infrastructure focus seems to continue.

eTEN staff and others interviewed and Management Committee minutes (esp. the 29.10.2003 meeting) suggest a variety of reasons on both sides. There were cultural differences between the 'banking mindset' of the EIB and the service orientation of the programme. The lack of physical capital assets that could secure loans was cited in interviews and the EIB representative to the Management Committee on 29/10/2003 "emphasised that financial and economic rates of return are crucial factors for the Bank's allocation of resources, and that it was not fully clear to what extent the Commission takes those as equally decisive measures in their selection procedure." Moreover, eTEN projects were far too small to engage normal EIB funding mechanisms, which typically started at about €50 million.

From the Commission and programme perspective, the projects most likely to get EIB funding would not engage with eTEN and *vice versa*. In addition, concentrated attention on fair and transparent use of the grant modality and the need to manage the reorientation reduced the attractiveness of new and complex procedures.

Efforts to publicise EIB funding to projects and proposers seemed to have been appropriate and certainly do not account for the zero take-up. We conclude that there was no genuine demand for the particular forms of funding offered by the EIB and related institutions.

The regional development funds – in particular, the European Regional Development Fund (ERDF) and the European Social Fund (ESF) – presented a potentially greater opportunity to leverage additional funding and directly advance the programme's objectives. ERDF/ESF objectives include the modernisation of education and employment systems (Objective 3) and the promotion of sustainable development. The Urban II and Equal initiatives, in particular, seem to address potential eTEN activity areas: the support on offer is extremely large in comparison to eTEN and the guidelines directly call upon the regions to invest in the transition to the knowledge society and towards sustainable development. The connection to eGovernment and eHealth projects seems natural, and the European Parliament suggested on more than one occasion that eTEN could serve as a catalyst to help regions find the best ways to make such investments. In this case, there seems to have been little attempt to make the regions directly aware of what the programme had to offer, since the communications strategy did not address regional authorities[5], although some regional authorities were involved in eTEN projects.

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[5] It did address local authorities participating on their own behalf in ID projects, but not those capable of committing structural funds.

3 Efficiency of the Programme Operation

We have reviewed the operational procedures of eTEN within a framework of the successive phases that would be visible to a project participant – that is, starting with the Work Programme and Call for Proposals, and going on through (inter alia) proposal evaluation and contract negotiation, to the life cycle of the actual project and finally its post-funding development and outcomes.

3.1 The Lifecycle of Programme Operational Procedures

The activities of the programme can be separated into successive phases thus:
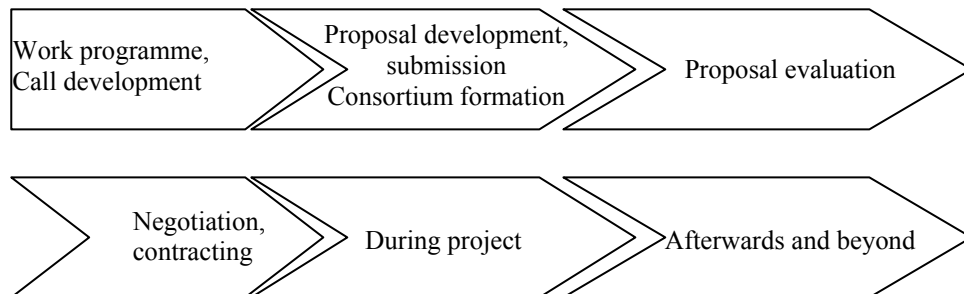
3.1.1 Work Programme and Call Development

3.1.1.1 Consultation

Interviews and minutes show clearly that the programme consulted very fully with Member State representatives and other DG INFSO units at the appropriate stages. Consultations included matters of substance (e.g. themes targeted), budget allocation and modality (e.g. co-financing levels, etc.).

Consultation within DGINFSO concentrated on the most closely related research and policy units (eHealth, eGovernment, eInclusion, eLearning).

There was also a degree of interservice consultation around implementation plans for specific projects[6]. Attempts were also made to develop relations with other DGs,

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[6] Examples include the RISER project (DG OLAF); Netc@rds (DG SANCO, DG EMPLOYMENT)

though these took time to develop[7]. Representatives of other DGs were invited to e.g. Management Committee meetings to build mutual awareness, identify common areas and ensure that related programmes (e.g. IDABC) did not duplicate or conflict with eTEN. However, there was no direct consultation with participants in the sectors involved, until the 'top-down' expert groups were instituted in the closing years of the programme. Such consultation would, we consider, have been likely to have been useful in identifying issues in need of attention such as time-to-market.

3.1.1.2 Thematic Balance

The reoriented programme simplified the thematic structure. However, the balance of activity across the themes was not controlled by policy or pre-allocated funding, but left as an outcome of a quality-based evaluation process. This approach was not uncontroversial, being criticised (from within equally as from without) as potentially favouring sectors with large financial resources (i.e. to write good proposals). In the event, the balance favoured eGovernment, eHealth and (to a lesser extent) Trust & Security. Some thematic areas were hampered by a relative shortage of good proposals. In the course of interviews with programme management, this shortage was linked variously to various causes, including diffused constituencies and low levels of market orientation among the stakeholders concerned. Given the broad objectives of the programme and the availability of other forms of support there seems little basis for criticising the lack of a more active 'tuning' of the thematic portfolio, and the reliance on self-selection and quality of proposals seems to have been a good pragmatic approach to delivering support that complemented the thematic emphases of other programmes.
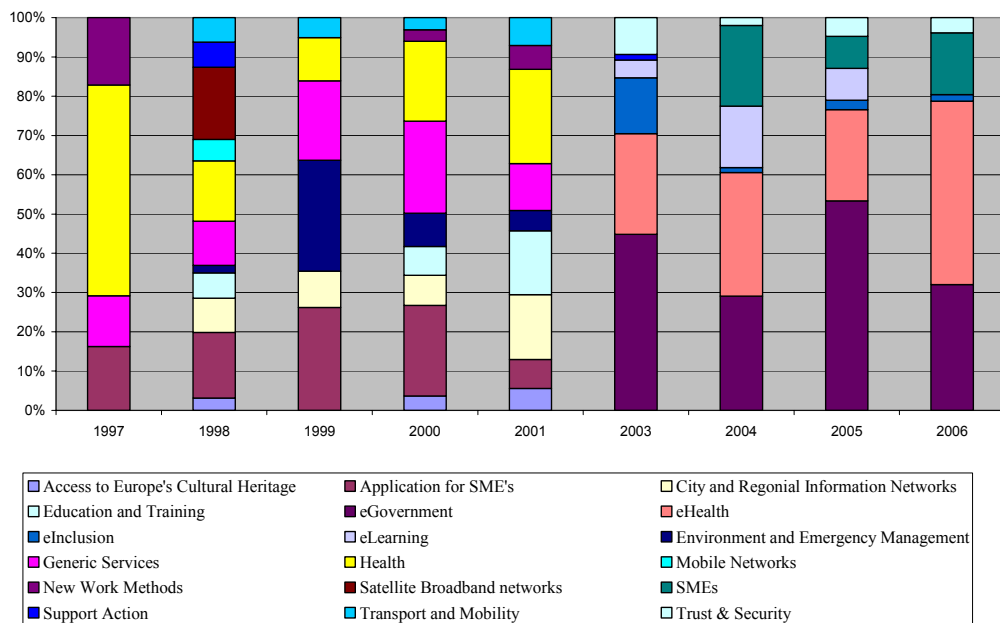

Figure 3: Proportionate funding across thematic areas

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[7] For example, a close consultative relationship developed with DG ENTR, though no joint projects with EIB/EIF resulted.

Table 3 shows the allocation of funding by theme and instrument during the post-reorientation period. These are proportional allocations within each year (the totals in each column sum to 100%). They show first that some themes were funded more extensively than others under the quality-led allocation mechanism. While it is not possible to argue that e.g. eGovernment is inherently 'better-suited' to eTEN than other themes, an explanation may emerge from evaluation of proposal success rates. The inauguration of the SME thematic area led to an initial surge as 'pent-up' projects were funded, which then settled back. The 2005 surge in eLearning and SMEs came primarily at the expense of eInclusion and (to a lesser extent) eGovernment; and by the time the 30% cap came into effect, the programme had achieved a much more even distribution across thematic areas. Within all themes, the implementation of the 30% cap was associated with an immediate reduction in MV project funding, but the time series is too short to attribute trend significance to this development.

Table 3: Allocation of funding by instrument and theme by Call year after 2003

Theme	Project type	2003	2004	2005	2006	Grand Total
eGovernment	ID	16.7%	2.6%	38.5%	10.9%	17.3%
	MV	28.1%	24.8%	14.8%	21.1%	22.2%
	SA		1.6%			0.5%
	Total	44.8%	29.1%	53.3%	32.0%	40.0%
eHealth	ID			8.7%	27.5%	7.8%
	MV	25.7%	30.7%	14.5%	19.2%	22.9%
	SA		0.8%			0.2%
	Total	25.7%	31.5%	23.2%	46.7%	30.9%
eInclusion	MV (= Total)	14.2%	1.3%	2.4%	1.7%	4.8%
eLearning	MV (= Total)	4.5%	15.7%	8.1%		7.8%
SMEs	ID				8.3%	1.6%
	MV		20.0%	8.2%	7.4%	9.4%
	SA		0.6%			0.2%
	Total		20.5%	8.2%	15.7%	11.2%
Support Action	SA (= Total)	1.5%				0.4%
Trust & Security	ID			1.7%		0.5%
	MV	9.3%	2.0%	3.0%	3.9%	4.4%
	Total	9.3%	2.0%	4.7%	3.9%	4.9%
Grand Total		100.0%	100%	100%	100%	100%

3.1.2   Pre-submission: Consortium Formation and Proposal Preparation

The programme developed and documented an extensive set of tools for informing potential participants about individual Calls, partner search and advice on proposal preparation, involving input from National Contact Points and from Programme personnel. Some aspects of the engagement strategy seem especially noteworthy.

First, geographical extent – in addition to Infodays in eligible Member States, regional Infodays were also held in connection with an initiative to build regional public service projects. **Figure 4** shows the number of Infodays held over the life of the programme.
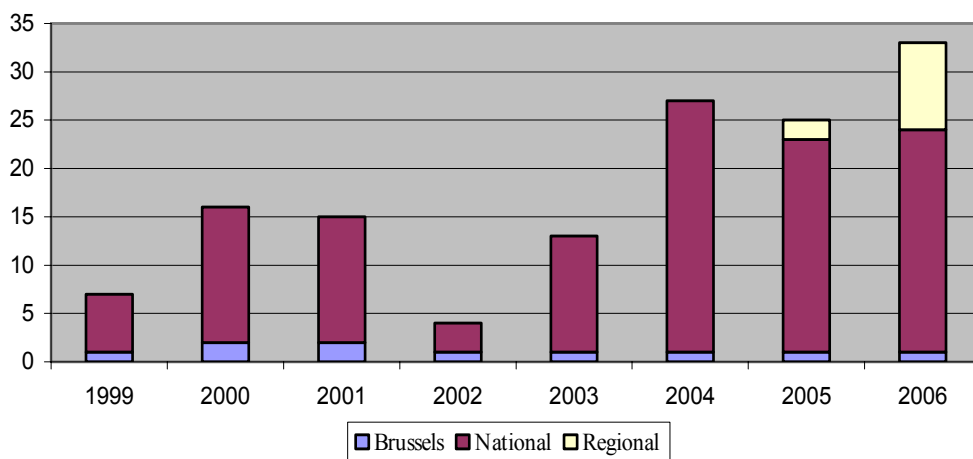

Figure 4: Infodays

Second, this level of engagement connected the programme very closely to the National Contact Point (NCP) network. The NCPs provided the continuing national point of

presence throughout the programme and were centrally involved in raising awareness of the programme. In addition, they were themselves networked with other NCPs[8] and, in some cases, with national members of the Management Committee[9].

3.1.3 Proposal evaluation, contracting and negotiating

The procedures used for evaluation of funding proposals were highly formalised; after 2003, they were consistent across Calls (allowing for changes in Work programmes and maximum funding levels), effective and transparent. Evaluation criteria were published with each Call for Proposals to permit proposers to self-assess with some confidence[10] prior to submission. The criteria were related to programme objectives and to sound management, clearly explained and appropriate to the purpose. Programme management conducted an initial eligibility and completeness check whose effect was limited to the exclusion of an extremely small proportion (< 1%) of proposals. Aside from this, all proposal evaluation was undertaken by independent experts. While the minutes of the Management Committee reveal some discussion about the proportion of consultants as compared to public servants among the experts, for every Call the MC agreed that overall proposal evaluation arrangements were appropriate. Each of the proposal evaluations carried out in the last four years of the programme was itself reviewed by seasoned evaluators serving as independent observers who, in each case, approved the arrangements for and conduct of evaluations.

A striking feature of the evaluations was the particular care given to the formulation of evaluators' comments. For unsuccessful proposals, these formed a sensible basis for improving any subsequent or resubmitted proposal. For successful proposals, the (often extensive and significant) comments were used to guide contract negotiations, particularly about technical annexe revisions. Whilst desirable in itself, this feature was part of a generally heavy emphasis on negotiation[11] which was frequently prolonged and thus contributed to undesirably long times to market. Substantial negotiation effort was seen as necessary in order to strengthen projects. The 'negotiation' phase of activity in fact comprised three distinct phases: credential checking; technical annexe drafting, and contracting.

We were advised in interviews that efforts to include SMEs contributed to delays in credential checking, primarily as a result of the need to verify status and eligibility.

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[8] According to interviews with long-standing NCPs, the group communicates well and has periodic meetings amongst its members, which helped spread good practice, build the inclusion esp. of new Member State NCPs and enhance the possibilities for supporting trans-European consortium formation. However, this experience was not universal and there was a sense on all sides that this could go much further.

[9] A national Management Committee representative drew particular attention to the value of close relations between the MC and NCP as a way of improving the 'public face' of the programme. Here, too, there was a sense of a missed opportunity to provide valuable feedback to the members of the MC, especially as they were, for the most part, drawn more from the telecommunications and technology side than the application or service sides.

[10] In many cases proposers were aided in this by NCPs, programme staff and prior project holders.

[11] We note for the record two specific ambiguities. The legal basis for negotiation in competitive tender procedures is not clear: unlike the case of RTD, there does not seem to have been an explicit derogation from the general presumption of award without negotiation. However, the various public procurement possibilities intermediate between no and full negotiation – e.g. the Competitive Dialogue and Negotiated Procedure – while intended for use only in narrowly-defined situations - on superficial (i.e. non-legal) examination seem immediately applicable to eTEN and especially to ID projects.

Efforts to include public administrations prolonged the other phases of negotiations as a result of institutional obstacles to speedy negotiations and difficulties with prolonged ones[12].

We were also advised that the operation of these procedures was to some degree complicated by external developments, budget deadlines, etc. Further investigation could verify the extent of these effects, the degree to which projects were adjusted during negotiation, the extent of variability in contracts and, based on these data, the cost-effectiveness of the trade-off between longer contracting and negotiation procedures on one side and stronger projects on the other.

Credential checking - the full establishment of the legal and financial status of those applying for funding - was not commenced until after agreement by the Programme Management Committee of the lists of projects for funding: we were informed in interviews that this is standard EC procedure but have not located a particular requirement. Technical Annexe negotiation was not commenced until after credential checking was completed: given the relatively tiny proportion of retained proposals excluded at this stage and the serious consequences of extending time to market, we seems unnecessary and potentially counter-productive. The interim evaluation report already commented adversely on negotiation times yet subsequently they increased greatly. While this stems in large part from changes in the nature of projects engaged and may also reflect external influences, it nonetheless raises issues worthy of further evaluation.

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[12] Public administrations were often bound by different national legal requirements. Annual budget cycles created difficulty in committing to three-year projects; others experienced changes in political leadership and priorities during negotiations that could last up to a year. For both SMEs and public administrations, negotiation problems were sometimes compounded by 'prime negotiator' coordinators who kept some partners 'out of the loop' for a variety of reasons. In some cases, this led to consortium instability over issues of e.g. IPR; in others, it meant that some partners' legal scrutiny could only begin once negotiations were over. These problems could have been mitigated either by wider participation in negotiations or by a contract based around sub-contractors rather than partners.
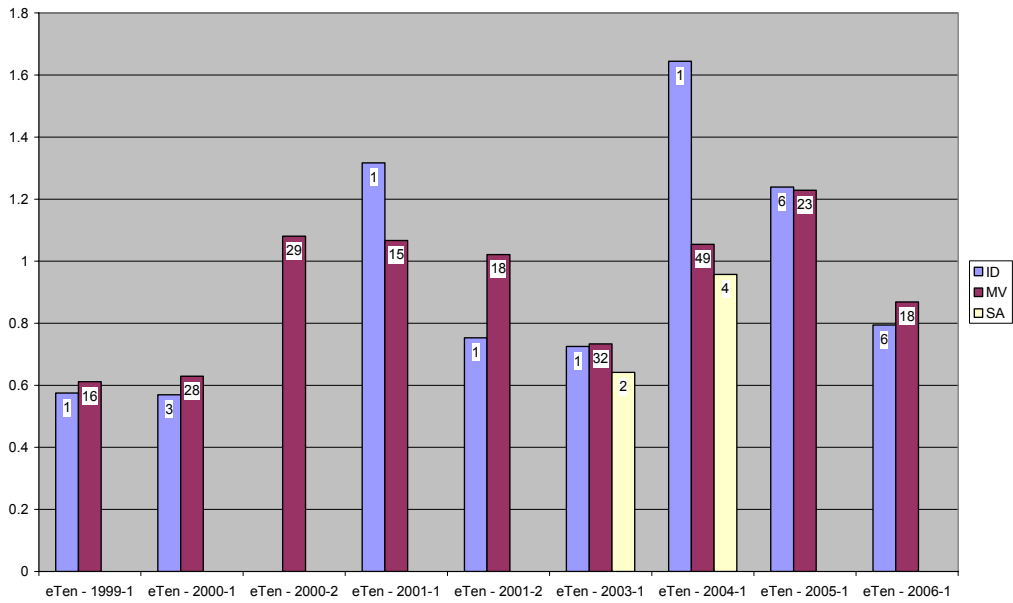
Figure 5: Average negotiation time[13]

Beyond negotiation time, the duration of eTEN projects was often quite long compared to many privately funded initiatives. While it is not possible to measure 'time to market' accurately for deployment of eTEN projects, the time between proposal submission and project end shown in **Figure 6** gives a sense of the overall timescale.
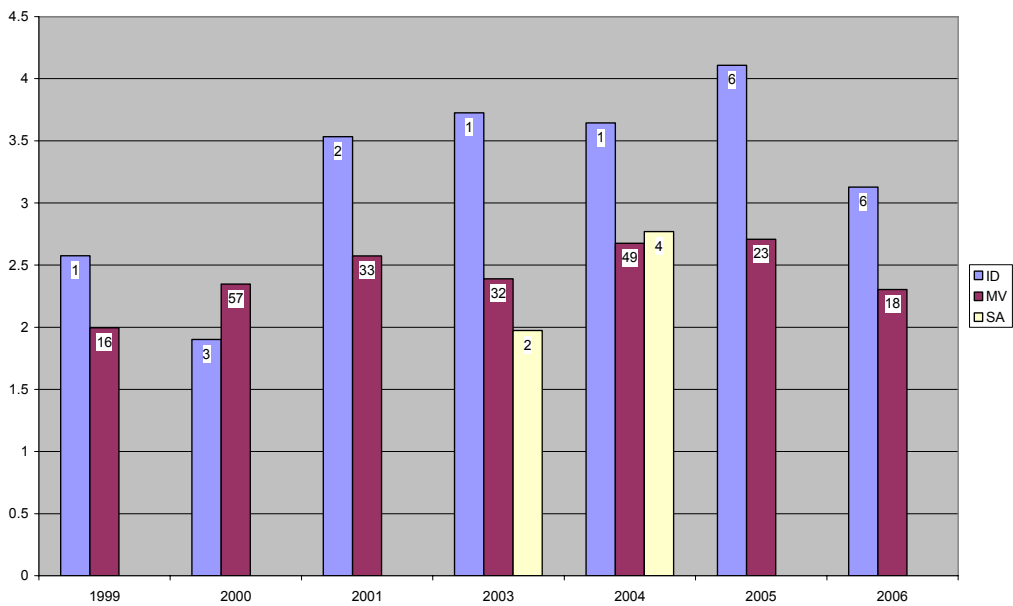
Figure 6: Average project timescale from submission to end[14]

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[13] Number in bar indicates number of projects. Includes only Calls starting 1999, and approximated by the time from proposal submission to project start - this is an over-estimate as it includes time spent in evaluation and selection, time between selection and invitation to negotiate and time between end of negotiations and project start.

[14] Number in bar indicates number of projects.

3.1.4 During project life

Periodic project reviews offer, in principle at least, a chance to provide feedback on progress and suggest appropriate adjustments. Such adjustments were more frequent during the early years of the programme, and even led to legal disputes when market validation revealed that the project originally proposed – and for which Community support was offered - was no longer in alignment with market development. In at least one other case[15] the need for change was caused by more rapid evolution of the market which shortened the deployment cycle. However, the overall impression of those interviewed was that project review often tended more to check progress against contractual milestones than to draw formative or broader lessons or test assumptions.

Considerable effort was devoted to building a community of interest among active projects and encouraging projects to engage in open dissemination (via logos, websites, etc[16].) and discussion (via workshops). Such activities have a two-fold function. They support projects and improve their work through collegial interaction. They also allow projects a chance to promote themselves and the programme – and to take pride in what they have achieved. Preliminary indications from documents and interviews suggest that the latter function took precedence: it remains to verify the substantive assistance provided by these activities and the degree to which the additional burden was seen as appropriate by those involved.

Before the 2003 restructuring projects were always required to produce a business plan. This too often amounted to a largely token exercise prepared with the aid of a relatively closed group of consultants; and did not always provide the intended stimulus to consortium building and the identification, endorsement and implementation of viable business models. The 2004 intermediate evaluation therefore recommended that these essential outcomes be addressed more directly and holistically. One key aspect was the requirement for diverse consortia and the involvement of the whole value chain in project consortia now represents a major and possibly unique strength for eTEN.

We note that the procedural aspects of eTEN participation were seen by participants as burdensome throughout the programme. Particularly in the early phases, when co-financing was more restricted and the need to develop proposals aimed squarely at sustainable deployment was less widely recognised, this will have led projects with better prospects to seek funding elsewhere. Against this finding it was put to us in interviews that the procedural burdens achieved a positive selection effect, screening out marginal proposals and those conceived solely to obtain financial support. In addition, some of the procedural 'obligations' (e.g. project workshops) directly helped consortia and the eTEN constituency.

3.1.5 Afterwards and beyond

The programme implemented an extensive communications strategy from 2003 onwards in order to use programme results to widen service deployment across the Member States; to attract good proposals, and to help them find the necessary

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[15] EURASKA, an MV project from the first 1999 Call.

[16] The logo was rolled out as early as 2001; the website is of similar vintage; these elements were absorbed into a reintegrated communications strategy as part of the 2003 reorientation, and the discussion in this document refers to this revised communication strategy.

sustaining support through participation of those who represent demand and will deploy the services, in particular public administrations.

The resources and instruments included dedicated personnel - a Communications Officer, a full time web-engineer a part time secretary and full time *stagiaires* (interns) on five-month secondments. Our interviews showed considerable external awareness of eTEN; presence of eTEN at international conferences was increased, and the web site was well used.

We think this likely to have been a very positive benefit, especially since eTEN needed to lever activity outside the programme in order to achieve its benefits, but we do not at this stage have the necessary evidence to state this with certainty.

4 Effectiveness of the Programme, and expected impacts

The effectiveness of the programme is largely defined by the extent and value of the impacts that arise from it. It is too early to expect a clear view of long term benefits arising from eTEN activities, but some classes of impact arise more quickly (e.g. impacts on seeding progress in underdeveloped areas of service deployment) and in these cases we are able to form a view from the evidence currently available.

The structural nature of the TEN rationale favoured essentially qualitative objectives. This concentration on qualitative objectives and the coincident lack of clearly-defined and concretely measurable success criteria were problematic, not least because they limited the ability of management to prove success.

The programme depended on leverage for its impact. Because it needed clearly to communicate its unique character, mechanisms and objectives, because it needed to maximise dissemination of good practice and the demonstration effects of its projects and because structural transformation and sustainable quality relied on 'building out' engagement and communication in the participant network, external relations were particularly important.

Consistent with the objectives, the most relevant expected and desired impacts were structural in nature. It could not reasonably be expected (and indeed was not expected) that eTEN would produce measurable macroeconomic impacts; neither its objectives nor competence would have justified such expectations. It did strive, with a fair degree of understanding and ultimate success, for tangible manifestations of policy and changes in the organisation of markets for services of general interest. Three quite distinct impact areas can be anticipated.

- First, the programme appears to have played an essential role in seeding or accelerating progress in previously absent or underdeveloped areas of service development[17], both directly and through the demonstration effect of successful projects. The performance of eTEN in engaging SMEs, NMS and public sector participants in increasingly significant project roles was also significant in this aspect.

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[17] E.g. in areas such as public service systems accessibility and interoperability, and in projects such as Michael and Michael+, Netc@rds and Netc@rds for EHIC, etc.

- Second, it catalysed the formation of new networks or communities of interest[18] around specific action lines and generally around its global objectives through its portfolio of activities. These included project support; active engagement of deployers and providers of other competencies essential to sustainable deployment; and the broad communications strategy. The shift towards top-down development and the need to combine the innovative capabilities of the 'bottom' (including the user community) with a tight linkage to overall policy objectives; and an emphasis on innovation rather than invention, showed how a combination of 'top-down' and 'bottom-up' approaches could generate much closer alignment between proposals submitted and programme objectives than would be the case with either approach alone.

- Third, eTEN addressed the wider policy context in relation to innovation policy, the Information Society and (potentially) a far greater set of Community policy activity. The programme successfully positioned itself at the heart of eEurope, aligning its objectives directly with those of the overall framework, developing resonance with other (not only RTD, but also regulatory) actions under what became i2010, and thus giving concrete expression to policy decisions. In the process, it exemplified the value of making deployment an explicit policy objective, even for policy frameworks that may not have direct instruments or budgets. The innovation policy linkage is further strengthened by the public procurement initiatives that attend or will be catalysed by eTEN deployments[19].

In addition to the above there is a potential fourth element in the impact of eTEN as a model programme. This has two aspects: the first is that the eTEN experience demonstrates the need for new approaches to new situations (for instance the possible need for a new management model for smaller directly mandated programmes). The second consists of the reuse or adaptation of eTEN structural and programmatic elements to enhance the effectiveness of other EC near-market interventions both on their own and as a coherent part of the i2010 policy set (including regulation, procurement, standardisation and RTD support).

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[18] eTEN tends to have relatively few entities involved with multiple projects although one specialist organisation, ATOS-ORIGIN, achieved 16 project participations in total through its Spanish and Greek companies.

[19] See e.g. Wilkinson (2005), Aho (2006).

5 Relevance of Activities to Objectives; Appropriateness; and Sustainability

The objectives of eTEN were primarily structural. Given the relatively small size of eTEN's funding in relation to the size of the whole ICT sector, meaningful outcomes necessitate leverage (as noted in Section 4). eTEN was designed with very clear relevance to policy objectives: its evolution tracked the evolution of policy very clearly. No ex post evaluation can be complete without consideration of the vital issue of the long-term sustainability of what has been achieved. For eTEN the question of sustainability divides into two issues: direct sustainability of projects (whether the service deployed continued for a significant period); and catalysis of structural change (whether there was an appreciable change in the behaviour of organisations (e.g. public administrations) whose actions are necessary to structural change?

From the outset, the programme operated in a changing market and policy environment. The global objectives, as reflected in the Guidelines and further elaborated under the evolving policy thinking of what became i2010 constituted a coherent vision of the role of ICT in the Information Society. This did not so much change as deepen. However, that part of the objectives which required a public intervention environment and which moreover could be addressed by a programme of the size and position of eTEN did change. This changing need was reflected in the evolution of the programme's objectives to concentrate on services rather than infrastructure or technology, and ultimately to strive towards the interoperable and trans-European deployment of services of general interest. The evolution of the programme's specific objectives we find to have accurately reflected the evolution of the need for public intervention in a timely fashion and also retained a high level of alignment with the objectives of complementary programmes, whilst maintaining the overarching rationale of the programme.

The issues relating to the broader policy context of the programme (especially Lisbon Agenda policies and activities under the i2010 framework) exemplified 'internal coordination' issues relating to other DG INFSO support activities, other EC initiatives and Member State parallel or complementary programmes. Such overlaps are characteristic of all EC support activities, and seem particularly acute in view of the

restructuring, the reputation effects of difficulties encountered before 2003[20], the near-market nature of the intervention and the broad range of (loosely parallel) eGovernment initiatives being pursued throughout the EU at all levels.

The combination of a strong communications strategy with the much wider inclusion of influential 'deployers' (particularly public administrations) in projects – at least in the later stages of the programme – are consistent with the clear policy relevance of eTEN.

The sustainability of activities in the years prior to the interim evaluation was low. Improvements made during the life of the programme seem likely to improve that status in the later years however. Structural change objectives became more prominent in eTEN's activities in its closing years and here the sustainability prognosis is good. The particular eTEN feature of involvement of the whole value chain (adopted in the later and more productive stages of the programme) gives good encouragement to such a positive prognosis since activities currently in train, and with this key feature, contain within them the means of mobilising all of the functions necessary to successful deployment. It appears likely that the introduction of support for 'top-down' expert groups may also be significant in this better prognosis.

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[20] These comprise the impression among potential participants of inadequate funding and cumbersome procedures. Before the cancelled call, there were already problems with the level and quality of proposals (esp. ID, but also MV) - because there were outreach efforts before 2003 via the programme website and NCPs, the problems lay in the programme's reputation. The alternatives are either that people were not aware of the programme or that the sector(s) themselves were not capable of forming viable potential projects or consortia, in which case the near-market effort would have been misplaced and more attention to capability-building would have been appropriate.

6 Findings and Recommendations

This section abstracts the findings from the evaluation material in the preceding sections. Limited recommendations are made in areas where the lessons learned from eTEN can usefully carry forward to other programmes. We concentrate on the ICT-PSP, but we are also conscious of generic issues applying to near-to-market programmes more broadly.

Overall success of the Programme

- eTEN was ultimately a well run and, in its later stages, successful programme, which contributed to the attainment of its over-arching objectives. This finding is however qualified in two ways. Success was not achieved without difficulties, particularly in the early years of the programme. Additionally the extent of its success is not quantifiable – in part because its impacts are not yet fully visible and in part because its overarching objectives were expressed in qualitative terms without specific measurable success criteria.

Programme Implementation Mechanisms

- Funding mechanisms other than grant aid were not utilised: this is unsurprising given the modest size of the projects, and we do not consider that this significantly affected the programme's performance. Linkage to Regional Development Funds was weak, despite the apparent scope for benefits: a potential enhancement to the programme's reach was missed in this respect.

- The Market Validation (MV) project mechanism was initially over-utilised (in part because of its more favourable financial arrangements for participants); this was remedied in the later stages of the programme, but many early MV projects did not result in any visible subsequent deployment. This situation also improved in the later stages of the programme.

- The Initial Deployment (ID) project mechanism came on stream late, but worked well, particularly following the much-delayed implementation of the 30% cap on overall support as a proportion of total cost. Some promising deployments are now in progress and prospect, including some flagship successes originating from earlier MV projects, and from related programmes (e.g. eContent Plus).

- The initial overall funding cap (10% of total costs for the combined market validation and initial deployment phases) we find to have been too low. As a result the programme must clearly have attracted fewer top-quality deployment proposals and sustained fewer market validation projects into initial deployment throughout the period during which the 10% cap applied than would otherwise have been the case. The necessarily lengthy legal process required to lift the cap to 30% delayed implementation of this necessary change until the penultimate Call. The number of deployment proposals best suited to the programme thus remained low until the final stages of the programme.

- Support measures (SCA) were only moderately used and the eventual decision to discontinue this mechanism was reasonable. Subsequent support to 'top-down' groups was a better option.

- The funding contracts allowed for insufficient flexibility. Project reviews were consequently limited in their ability to either direct or sanction necessary major changes of direction during project implementation. Project management believed that they had no realistic means of modifying this situation even when the problem had been recognised.

Efficiency of Programme Management

- From 2003 no major management issues arose and the standards of management processes; fairness, openness and transparency, and efficiency of day-to-day management were excellent post 2003.

- The operational procedures for preparing Work Programmes and Calls, their accompanying documentation and the receipt and evaluation of proposals improved continuously throughout the programme. Significant initial problems (particularly with proposal evaluation) were overcome and these mechanisms were subsequently satisfactory and, by the end of the programme, became excellent.

- Objective formulation and its reflection in work programme creation were sound and appropriate: we found no reason to criticise the evolution of objectives and indeed consider this responsiveness to change in the programme's external market (and policy) environment a very positive feature.

- The process leading to contracting projects (a sequence consisting of selection, credential checking, and negotiation of the technical annexes to contracts) took too long. This problem had been recognised by the Intermediate Evaluation, but subsequently to this the situation worsened considerably. Delays were ascribed to a combination of factors including the increased diversity of consortia; the incomplete or delayed engagement of consortia members; and the complexity of the rules and procedures.

- In addition, project time-scales were long relative to private-sector counterparts and the dynamics of fast-moving sectors. This, together with the delays in contracting projects, frequently resulted in a very long 'time to market', which is likely to have worked against successful deployments and reduced their potential impacts.

- Communication and outreach activities were sophisticated and well-developed. The combined effect of the communications strategy, the engagement of Member

State and regional development personnel and the design of the programme, was an extensive engagement of SMEs, public sector entities and participants from New Member States, particularly during the latter stages of the programme.

- The programme structure gave a direct line of contact with the National Contact Points (NCPs). It took time for the full potential of this channel to be activated but ultimately the NCPs played a significant role in facilitating successful proposals and projects.

Effectiveness, Achievements and Impacts

- As noted above, a significant proportion of early market validation projects did not continue into deployment. Whilst it is inevitable that some of the services being validated should fail, the proportion of such failures in the early years was remarkably high. From 2003 onwards this situation turned around, and interesting and valuable deployments are now underway or in prospect. Activities in the latter stage of the programme promise good impacts through the formation of sector-based value chain communities (especially in the public sector).

- The *direct* effectiveness of the programme in achieving deployment was thus rather modest in all but its closing years. However, its indirect effectiveness arising from the exemplary nature both of the programme itself and of its project activities was somewhat higher. Due in some measure to the leverage provided by an effective communication strategy, eTEN made more impact from 2003 onwards.

- Another significant component of the substantially improved effectiveness of eTEN was its increased emphasis on involving the whole 'value chain' in project consortia. This provided significant benefits:

  - The inclusion of end-users greatly increased the likelihood of eventual deployment;

  - The greater diversity of participation provided links into the portions of the wider 'innovation deployment system' which were otherwise outside the reach of funding programmes.

Fulfilment of Programme Objectives

- The later stages of the programme we find to have added real value through actions seeding and/or exemplifying structural change and also through placing actual deployment at the centre of policy development. The programme may thus reasonably be expected to produce strong overall impacts by stimulating new areas of activity and demonstrating the ways in which ICTs may contribute to effective policy relating to innovation and the Lisbon Agenda and i2010 objectives.

Sustainability of Activities

- Given the late stage in the programme at which Initial Deployment projects began to come on stream and the time needed before their eventual success can be assessed, long-term sustainability of activities is difficult to assess at this stage. However, the involvement of the whole value chain (adopted in the later and more productive stages of the programme), and the specific example provided by some of the projects that have proceeded into wider deployment via these value chains, strongly suggests a positive prognosis.

Recommendations

Particular circumstances led to reliance on negotiation for reaching suitable contractual arrangements and project orientation, which slowed deployment to time-critical markets. Time can be saved by starting checking credentials, etc. for participants in projects on the retained and reserve lists as soon as the evaluation is completed, and carrying them forward in parallel with negotiations on the creation of the necessary technical annexe to contracts. Guidance to negotiation should also indicate clearly that tough negotiation isn't the same as prolonged negotiation (sometimes just the opposite) and strive for inclusion of all partners.

In the same spirit, both procedures and contractual forms should be examined with an eye to rebalancing their flexibility and accountability and to strengthen opportunities for extended partnerships beyond the original consortium (including alternative sources of financial support).

There is a vital need for actual real-world deployment and a resulting need to involve the whole value chain in project communities (even if not in each and every phase of a project); rather than only the potential effective suppliers. This can be strengthened by combining 'demand-led' and 'top-down' approaches in generating deployments in the public sector.

Bottom-up modalities of proposal formation also encourage innovative applications for and by SMEs (the emergence of SME actions in eTEN as a specific action line is itself a helpful pointer).

eServices may reduce administrative burdens on SMEs (e.g. in complying with EU directives). This is a particularly useful pointer to potential solutions to one of the more intractable problems raised by the Lisbon Strategy.

RAND Europe

Glossary

CIP - The first "Competitiveness and Innovation framework Programme (CIP)" is a coherent and integrated response to the objectives of the renewed Lisbon strategy. Running from 2007 to 2013, it has a budget of approximately EUR 3.6 billion. It represents a 60 % increase in annual spending on actions related to competitiveness and innovation by 2013 compared to 2006.

Council - Council refers to the 'Council of Ministers', the principle decision-making body within the European Union. It has both executive and legislative powers, the latter in some cases exercised jointly with the European Parliament (co-decision procedure). The Council is composed of one representative at ministerial level from each Member State. Which Ministers attend each Council meeting varies according to the subject discussed, e.g. The Minister of Science in the UK attends the Research Council.

EC - The European Commission - made up of 20 Commissioners nominated by the Member States - both initiates proposals for EU legislation and executes EU policies and actions.

eContentPlus - The eContentPlus (formally eContent) Programme particularly supports re-use of public information.

EHIC - European Health Insurance Card (EHIC). Giving full application to the facilities provided by the coordination of statutory health insurance schemes, the EHIC allows Europeans staying temporarily in another Member State to access "necessary care" under the same conditions as nationals of that country.

EP - The European Parliament - which is made up of elected representatives (MEPs) from all the Member States. It shares decision-making power with the Council in a number of areas including research and education.

ERA - European Research Area. On 18 January 2000, the EC issued a Communication entitled "Towards a European Research Area" which proposed ways in which research in Europe could be more effectively organised and coordinated.

eEurope - A political initiative of the EC to allow Europe to benefit fully from the Information Society.

eTEN - The European Community eTEN programme helps to stimulate the deployment of innovative, trans-European e-services of social or economic interest. These services are intended to contribute to growth within the European Union, employment, social cohesion, and to help everyone participate in the new knowledge-based economy.

FP - The EU's Framework Programmes for Research and Technological Development, often expressed as e.g. 6FP (the most recent) or 7FP (current).

i2010 - i2010 is the EU policy framework for the information society and media. It promotes the positive contribution that information and communication technologies (ICT) can make to the economy, society and personal quality of life.

ICT - Information and Communication Technology.

ICT-PSP - From 2007 onwards, support to electronic services in areas of public interest will be provided by the ICT Policy Support Programme (ICT PSP), a component of the Competitiveness and Innovation Framework Programme (CIP), which will run until 2013.

IST - Information Society Technologies. A priority (theme) within the 6th and 7th Framework Programmes of IST-RTD.

Lisbon Strategy - The objective of the Lisbon Strategy is 'to deliver stronger, lasting growth and create more and better jobs'. The original goals emerged from the Lisbon European Council summit of March 2000, and the target date for achieving them was set at 2010.

MS - Member States of the European Union.

NMS - New Member States (Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia).

RTD - Research and Technological Development.

SEVESO - The Seveso directive included, *inter alia*, minimum standards for monitoring the storage of hazardous chemicals.

SMEs - Small and Medium-sized Enterprises.