



EUROPEAN COMMISSION

Budget

Own Resources, evaluation and financial programming

Evaluation

EX ANTE EVALUATION

**A PRACTICAL GUIDE FOR PREPARING PROPOSALS FOR
EXPENDITURE PROGRAMMES**

December 2001

Table of contents

INTRODUCTION	3
WHY EX ANTE EVALUATION	3
Supporting programme preparation	3
Meeting formal requirements.....	4
WHEN, WHO AND WHAT	5
When?	5
Who?	5
What?.....	6
HOW TO DO IT?	6
Problem analysis and needs assessment	6
Objective setting and related indicators.....	10
Alternative delivery mechanisms and risk assessment	15
Added value of Community involvement.....	18
Lessons from the past	21
Planning future monitoring and evaluation	22
Helping to achieve cost-effectiveness.....	25
ANNEX 1: CHECK-LIST OF EX ANTE EVALUATION	27
ANNEX 2: THE COMMISSION COMMUNICATION ON EVALUATION (SEC(2000)1051).....	29
ANNEX 3: EUROPEAN ADDED VALUE (EAV) AND OTHER RELATED TERMS	30

"If you don't know where you're going, how will you ever know if you get there?"

INTRODUCTION

Ex ante evaluation is a fundamental tool for effective management¹ and a formal requirement. This document provides practical advice for Commission services starting preparations for a new or renewal of an expiring expenditure programme. It is not a standard, but meant to help solve the problems that services face when doing or commissioning ex ante evaluations.

This guide is specifically intended to give advice on ex ante evaluation of expenditure programmes. However, some of the approaches and ideas presented in it may also be applicable to policies, projects or other types of activities.

Readers, who only want to have a quick overview of the ex ante exercise are recommended to proceed straight to annex 1 which summarises its content in a **checklist format**.

Experience of ex ante evaluations is still scarce in the Commission, and there is also a lack of established good practice in the Member States or international organisations. To reflect increasing experience and to make sure that the document truly addresses the practical problems encountered, it will be updated regularly on the basis of comments and feedback received.

WHY EX ANTE EVALUATION

Supporting programme preparation

Ex ante evaluation is a process that supports the preparation of proposals for new or renewed Community actions. Its purpose is to gather information and carry out analyses that help to define objectives, to ensure that these objectives can be met, that the instruments used are cost-effective and that reliable later evaluation will be possible.

The Communication on Evaluation of July 2000 (point 2.3.1) emphasises that good quality ex ante evaluation is necessary because

- it allows a proper appreciation of whether the proposed level of funding and resources are in accordance with the expected results and impact, and
- reliable ex post evaluation, and hence accountability for results and impacts, is largely dependent on the quality of the preparation of the intervention at its outset.

¹ Commission's Communication (SEC(2001)1197/6&7) on the Activity Based Management (ABM) underlines the essential role of evaluation (including ex ante) as part of the management system.

The term “ex ante evaluation” is used in official documents, including the Implementation rules for the Financial Regulation (EC 1687/2001, Art.1) and the recent Communication on Evaluation (SEC(2000)1051). However, other terms, such as appraisal, policy analysis, impact assessment and feasibility study are also widely used to refer to practices similar to that of ex ante evaluation. There is no requirement for all preparatory analysis to be labelled “ex ante evaluation”. The term is used in this document as shorthand for the information needed to support good quality programme preparation and the analyses that produce this information.

An ex ante evaluation can take place at different levels of activity. It can address a policy, a programme or a project. According to Commission rules, it is obligatory for new and renewed programmes and other actions with resource implications.

Ex ante evaluation is also related to *programming*. In this context it can improve quality, relevance and comprehensiveness of programme design. The term "programming" can be used in slightly different senses, but generally it means the design and establishment of a multi-sectoral intervention, often involving different sources of funds and different managing services. A common example is the "Country Strategy Paper" or "Regional Strategy Paper" in the field of External Relations, where policies and activities are mixed in order to meet global objectives. Programming is not covered explicitly in this document, as individual services generally take their own standardised approach.

Meeting formal requirements

The general requirement for carrying out ex ante evaluations is based on the Financial Regulation (December 1977 as amended by Council regulation 2333/95 of September 1995) which stipulates that:

Article 2 of the Financial Regulation:

“The budget appropriations must be used in accordance with the principles of sound financial management, and in particular those of economy and cost-effectiveness. Quantified objectives must be identified and the progress of their realisation monitored. *To this end, the mobilisation of Community resources must be preceded by an evaluation to ensure that the resultant benefits are in proportion to the resources applied.*”

This requirement has subsequently been elaborated in the Implementation Rules for the Financial Regulation (Commission regulation no. 1687/2001, Art. 1):

1. Proposals for all new programmes and actions occasioning expenditure from the general budget of the European Communities shall be the subject of an *ex ante* evaluation, which shall identify:
 - (a) the need to be met in the short or long term;
 - (b) the objectives to be realised;
 - (c) the results expected and the indicators needed to measure them;
 - (d) the added value of Community involvement;
 - (e) the risks, including fraud, linked with the proposals and the alternative options available;
 - (f) the lessons learned from similar experiences in the past;
 - (g) the volume of appropriations, human resources and other administrative expenditure to be allocated with due regard to the cost-effectiveness principle;
 - (h) the monitoring system to be set up.

In certain sectoral policies such as structural policies and rural development, sectoral regulations include specific requirements for ex ante evaluation. Council regulation (No. 1260/99) lays down detailed instructions for carrying out ex ante evaluations in the main structural operations. These are supplemented by Council regulation (No. 1257/99, EAGGF), which concerns the support given for rural development activities.

WHEN, WHO AND WHAT

When?

Ex ante evaluation is a tool for *improving the quality* of new or renewed programmes and for *providing information* on the basis of which decision makers can judge the value of a proposal. Therefore it is **important to start ex ante evaluation work early on in the process when options for programme formulation are still open.**

In many cases ex ante evaluation can be carried out in parallel with or as a part of the programme design, feeding results into the preparation of the proposal. However, if new data needs to be collected, (for example, to support the assessment of the needs of a target population see point 4.1 below), an early start is important. In-depth investigation will usually be too time-consuming to be done when actual programme preparation has started.

Different amount of detail in the analysis is usually needed at different stages of the programme preparation. As some elements of the proposal may change in the course of its development, it is often necessary to revise some parts of the analysis accordingly. For example, it may be useful to leave the detailed specification of result indicators to a stage when the content of the programme has been fixed.

Who?

In-house work, for example by a team including members from the responsible operative unit(s), from the DG's evaluation unit or function and from the co-ordination/planning function, is often a good solution for organising an ex ante evaluation. Outsourcing the whole process to external experts may be impractical for reasons of confidentiality and because direct feedback of findings into programme preparation is important.

However, even if the co-ordination and main part of the ex ante analysis is carried out in-house, **some parts of it can often be entrusted to an external expert.** Examples are surveys of potential beneficiaries or organising workshops, where the assumptions and opinions of different stakeholders are tested. Involving members from other DGs can provide useful expertise and an objective view.

The results of the ex ante evaluation work will be needed when preparing the legislative financial statement. Co-ordination between the service's financial unit and the team responsible for the ex ante evaluation should therefore be ensured. For the assessment of risks, additional expertise may be sought, for example, from the service's internal audit and financial unit.

What?

How to actually carry out an ex ante evaluation should be decided pragmatically, taking into account the real information needs of each situation (see annex 2). The time and effort put into an ex ante evaluation should be proportional to the scale of the intervention that it supports. Existing information and evidence from earlier evaluations, studies and other sources should be fed into the ex ante process whenever possible.

A report that compiles the results of different stages of the ex ante evaluation process is useful for communicating the evaluation findings, although there is no obligation to provide a specific ex ante evaluation report. However, the **results of an ex ante evaluation should be presented in an abridged form in the explanatory memorandum** and in the **legislative financial statement** accompanying the proposal. Devoting a specific chapter or section to the results of an ex ante evaluation in the explanatory memorandum is usually appropriate, if only for ease of reading.

HOW TO DO IT?

Sections 4.1 to 4.7 below follow the elements of an ex ante evaluation as specified in the Implementation Rules for the Financial Regulation (see section 2.2). The purpose of each step is explained, and practical advice is given on how to carry them out.

Presenting the different elements in sequence does not imply that there is a particular order in which they should be carried out.

Problem analysis and needs assessment

Problem analysis and needs assessment
Objective setting and related indicators
Alternative delivery mechanisms and risk assessment
Added value of Community involvement
Lessons from the past
Planning future monitoring and evaluation
Helping to achieve cost-effectiveness

Purpose

The basic rationale of public programmes is to solve problems or satisfy needs. A particular situation being identified as a "problem" which needs public intervention is usually based on a general principle or ideal expressed in the Treaties, international conventions, strategic goals of the Commission or political statements with which the Community associates itself. Examples of such principles - or overall political goals - are the elimination of poverty, enhancing European competitiveness or ensuring sustainable development.

Problem analysis explains **how the specific problem(s) relate to the overall political goals or principles**, examines the factors that influence the situation that needs remedying and shows how the problem and factors relate to each other.

The purpose of conducting a problem analysis is to give a basis for formulating realistic and relevant objectives for the intervention.

Needs assessment involves a **detailed analysis of the situation, motivations and interests of the key actors**. It will help to further specify the objectives and, in some cases, to define the criteria for selecting beneficiaries so that the best possible effectiveness can be achieved.

Problem analysis and needs assessment should also both demonstrate the need for a public programme and therefore help to formulate justifications for the proposal.

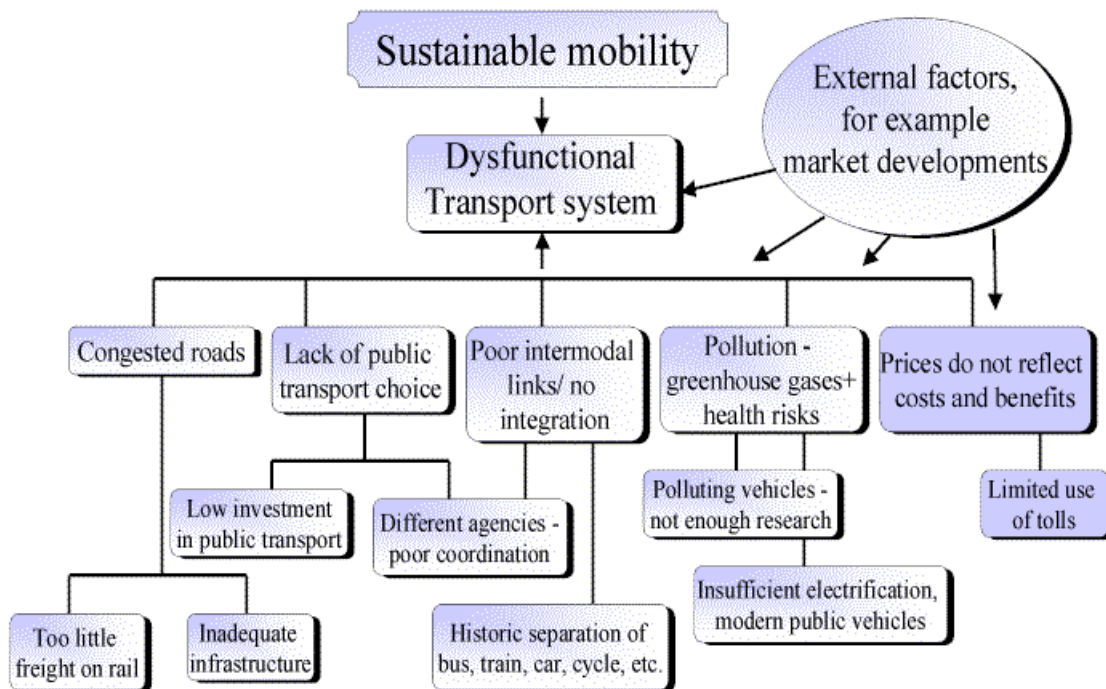
Practical steps

Problem analysis is the starting point for assessing the rationale of a public intervention and forms the basis on which the subsequent steps of needs assessment and objective setting will be built upon. It should firstly, identify and describe in concrete terms the problem to be addressed. Secondly, it should analyse the factors and actors involved and how they influence the problem. The purpose is to identify the critical factors and to "map" the cause-effect relations that underlie the problem to be solved. This is a basis for the subsequent steps of needs assessment and objective setting.

Indicative roadmap for problem analysis

- define the key aspects of the situation to be addressed by the programme
- identify factors that are likely to influence the key problem
- identify the main groups of actors that influence or that are being influenced by the situation
- analyse the cause-effect relations between the factors identified and the interests and motivations of the actors
- construct a visual presentation of these relationships, for example in the form of a "problem tree"

An example of a "problem tree"¹:



Needs assessment

After the problem analysis (or mapping) has been done, an assessment of needs should take place. This should cover both a **precise identification of the target group** and an **analysis of its actual needs**. "Needs" should be interpreted widely so that motivations and interests are properly understood particularly in programmes where the objective is to influence behaviour.

An identification and analysis of the needs and/or interests of the target groups establishes a sound basis for setting objectives and for choosing the most effective instruments.

Indicative roadmap for needs assessment

- identify the target population and the most important subgroups within it;
- investigate the situation, motivations and interests of these groups;
- make sure that the identified needs actually correspond with the general social, economic and environmental objectives of the Community;
- establish a hierarchy (order of priority) between different needs and rank them from the point of view of the objectives of the intervention.

¹ The example is purely illustrative and does not advocate any judgements on the issues covered.

In some cases, in particular if a genuinely new action is being prepared, it is useful to gather empirical evidence on the needs, interests and intentions of potential target groups, for example with the help of surveys or stakeholder consultations (see example below). As such investigations will take a lot of time, the whole ex ante exercise needs to start very early on in the whole programme design process. In other cases, sufficient information to support a needs assessment may be already available from other sources.

A SWOT analysis may be a useful tool for complementing the problem analysis and needs assessment. This includes identifying and analysing the strengths, weaknesses, opportunities and threats that are involved in the situation to be addressed by the intervention. This approach can help achieve a more dynamic view and to draw attention to the changes that are likely to happen in the problem area.

Example on needs assessment and problem analysis:

eContent is a four-year EU programme with two goals: to stimulate the development and use of European multimedia content in digital media world-wide, and to promote linguistic diversity in the Information Society. It is largely based on shared-cost projects. The programme was launched at the beginning of 2001 after a process of consultation and reflection that began in mid-1996. The problem analysis and needs assessment were based on:

- an economic analysis of the European multimedia industry, including an **in-depth survey of a large number of companies** and a trends analysis;
- an **economic and trends analysis** of the linguistic customisation sector (i.e. translation & adaptation);
- a structured **consultation with stakeholders**, involving an international conference, a Commission Green Paper, national information days and a public hearing;
- three **survey-based studies** to identify the main barriers to the development of the European multimedia industry;
- the **findings of the intermediate and final evaluations** of two preceding expenditure programmes in the same field.

The process resulted in the **identification of three main barriers to the development of the multimedia industry** in Europe:

- (1) Difficulties in commercially exploiting public sector information.
- (2) Poor access to linguistic customisation skills and tools.
- (3) Lack of investment in digital content and a fragmented intellectual property rights clearance system.

Further analysis led to the identification of corresponding target groups in each case:

- (1) Generators of public sector information and firms interested in potential public/private partnership.
- (2) Private- and public sector content providers, IT vendors and telecom operators, and providers of linguistic services and utilities.
- (3) Companies in the multimedia area and potential investors; operators of multimedia right clearance services.

Objective setting and related indicators

Problem analysis and needs assessment
Objective setting and related indicators
Alternative delivery mechanisms and risk assessment
Added value of Community involvement
Lessons from the past
Planning future monitoring and evaluation
Helping to achieve cost-effectiveness

Purpose

The purpose of this part of ex ante evaluation is to **translate high-level policy goals into more tangible quantified or otherwise measurable objectives**, and to define on what basis achievement will be measured. The preceding problem analysis and needs assessment help to focus programme objectives on the issues that are central for the policy goals.

Setting concrete measurable, or at least verifiable, objectives is fundamental to the success of your programme because it:

- (1) Clarifies the link between programme or activity level objectives and Commission wide strategies or other high-level objectives, as well as the link to the problem and needs assessment.
- (2) Provides a common understanding of what is important. A shared and clear view of objectives is the basis for effective implementation.
- (3) Forms the basis for defining the criteria for success and for specifying the indicators with the help of which progress will be measured.
- (4) Lays a basis for later evaluation of what has been achieved. If objectives are vague and too general, it is difficult to assess whether the intervention has been successful or not.

An indicator is information that helps to monitor progress and to report on objectives. Indicators

- (1) can be quantitative or qualitative
- (2) should be easy to monitor and allow credible reporting
- (3) should be reliable enough to trigger more detailed evaluation and decisions on follow-up when indicating that objectives cannot be met
- (4) should highlight the most essential aspects of the changes that the programme is aiming to achieve
- (5) should help to focus monitoring on those aspects of resource consumption, implementation, outputs and results that are most important to follow-up

How to set objectives and indicators

➤ *Start with the baseline*

Objectives should reflect the desired change from the baseline situation. An **analysis of the current situation** and linking this to the expected results is the basis for setting realistic and measurable (or at least verifiable) objectives. It is essential that the baseline is known at the outset and that objectives are precise enough to allow verification of their achievement.

In the case of expenditure programmes objectives are ideally expressed in terms of **expected effect of the programme on the situation it is meant to influence**, that is, as a **change from the baseline position**. This way of expressing objectives helps to link them to the problems to be solved or the needs of the target population.

➤ *Understanding different levels of objectives and indicators*

Different levels of precision and specification of objectives are needed for different purposes. Three different types of objectives and indicators can be distinguished:

- General objectives/Outcome or impact indicators

These are the policy goals of a programme or a activity, expressed in terms of its outcome or ultimate impact, and usually measured by global indicators such as rates of economic growth, unemployment or competitiveness. A public intervention is rarely able to determine directly the desired outcome as other factors also influence them. However, if successful, the intervention should induce change in the direction of the intended outcomes. Defining clear objectives for the outcome or ultimate impact are therefore vital for evaluating a programme or an activity.

- Specific objectives/Results indicators

These are the more immediate or intermediate objectives of a programme or activity, i.e. the targets that first need to be reached in order for the general objectives to be achieved. Specific objectives are expressed in terms of results, i.e. the direct and short-term effects of the programme or policy (see examples below). At this level again, the achievement of result objectives is usually not fully under the control of those managing the intervention, even if the other external factors influencing the results are fewer and more controllable than at the level of general objectives.

- Operational objectives/Output indicators

Operational objectives refer to the actual deliverables that the programme or activity is expected to produce for its beneficiaries. Their achievement is, usually under the direct control of those managing the intervention, and can be directly verified. Operational objectives are expressed in terms of outputs, i.e. products or services generated by the programme.

Ensuring coherence between the different levels of objectives for an activity is necessary to ensure that the operations carried out actually contribute to the achievement of the general policy objectives as efficiently as possible. Ideally, objectives should be set and specified through the presentation and analysis of the intervention logic¹ of a programme.

➤ *Asking questions*

Asking simple questions can be a useful technique for defining objectives and indicators, in particular at the beginning of the process:

- What goal are we working towards and what do we want to achieve?
 - The answer will reveal the *general objectives*.
- What will be different from the current situation when we have achieved it?
 - The answers will indicate *specific objectives* in terms of results.
- What do we propose to deliver to achieve the goal?
 - The answers will indicate *operative objectives* in terms of deliverables and give ideas on output indicators.
- How will we know if we are on course to meet the target?
 - The answers will give ideas for defining *intermediate progress indicators*.
- How can we judge if the action has been successful or not?
 - The answer will give ideas for defining *success criteria*. This is often a useful step towards defining more concrete result and outcome indicators.
- How do we know if the desired change has been effected?
 - The answer will give ideas for defining *outcome indicators*.

Although designed specifically for project appraisal, the Logframe method² is one possibility for establishing a systematic approach for analysing the problem and defining objectives and indicators. The output of this technique is a *Logframe matrix*, which presents in an abridged form the links between overall objectives, results, activities to be carried out, indicators and the sources for data on the indicators.

¹ See page 25 of the guide *Evaluating EU Expenditure Programmes*, DG BUDGET, January 1997, available at http://europa.eu.int/comm/budget/evaluation/pdf/guide_en.pdf

² See for example *Manual for Project Cycle Management*, EuropeAid Co-operation Office, March 2001

The above questioning or building a Logframe matrix can be done, for example, in a workshop animated by an external consultant specialising in this kind of work. The presence of an external moderator can help to stimulate discussion and to spot weaknesses in established ways of reasoning.

➤ *Check ideas against methodology*

Initial brain-storming and question sessions will generate preliminary ideas. These should then be checked back against the following principles.

- **Setting smart objectives**

Objectives are useful if they influence behaviour by guiding choices. General policy level objectives may be wide and abstract, indicating the overall purpose and direction. However, if the specific and operational objectives are to be effective in the above sense, they should be:

- **Specific.** Objectives should be precise and concrete enough not to be open to varying interpretations.
- **Measurable.** Objectives should refer to a desired future state (as compared to the baseline situation), so that it is possible later to observe whether the state has been achieved or not.
- **Accepted.** If objectives and target levels are to influence behaviour, it is necessary to ensure that they are accepted, understood and interpreted similarly by all of those who are expected to take responsibility for achieving them. In addition, objectives and indicators will always be imperfect pictures of the tasks to be carried out, not least because they should focus on the main issues only. These shortcomings must be spelt out and recognised as such between all involved, i.e. notably between managers and their staff.
- **Realistic.** Objectives and target levels should be ambitious – setting an objective that only reflects the current level of achievement is not useful – but they should also be realistic so that those responsible see them as meaningful.
- **Time-dependent.** Objectives and target levels remain vague if they are not related to a fixed stretch of time.

Finally, objectives should be kept few in number and address key elements of activities. Too many objectives or indicators dilute the strategic impetus with too great a level of detail and suggest that the objectives of the programme or activity have not been clarified sufficiently. Moreover, limited human and financial resources should be focused on key objectives.

- **Using and choosing indicators**

Indicators should reflect the central aspects of the results or outcomes that are being sought. However, *defining* the relevant indicators is not enough - **mechanisms for collecting data on their values** are also needed. Ideally

these should be in place when implementation starts. One factor in the choice of indicators is the ease with which relevant data can be collected: collecting data on an indicator should not be more costly than the use-value of the information it provides.

- **Criteria for indicators**

Relevant	Clear link between the indicator and the objective
Easy	Low cost of data collection and easy to monitor
Credible	Unambiguous + easy interpreted + credible for those reported to
Accepted	Discussed with the staff of the department
Robust	Resistant against manipulation by those responsible
Cost efficient	Benefit for monitoring and credibility of reporting outweigh cost of data gathering

By definition, **indicators only give a partial picture of the progress achieved**. They indicate certain essential aspects of programme performance, but do not explain *why* their level is what it is. Therefore the use of indicators always needs to be **complemented with an analysis of qualitative factors** and with an interpretation of the data produced.

Examples of output, result and impact indicators:

Field of Intervention	Output Indicators	Result Indicators	Outcome/ Impact Indicators
Promotion of rural areas	N° of projects receiving financial aid	N° of enterprises moved in the area	Level of migration from the area
Agri environment	Area subject to input reduction actions	Nitrogen balance of the area (kg/ha/year)	Level of concentration of aqua pollutants
Assistance to SMEs	N° of SMEs receiving advice	Gross jobs created	Net jobs created/ safeguarded after 18 months
Vocational Training	N° of training places	N° of participants achieving formal qualification	% of qualified participants getting an equivalent job

Alternative delivery mechanisms and risk assessment

Problem analysis and needs assessment
Objective setting and related indicators
Alternative delivery mechanisms and risk assessment
Added value of Community involvement
Lessons from the past
Planning future monitoring and evaluation
Helping to achieve cost-effectiveness

Purpose

"The Americans spent millions of dollars developing a pen that could be used by astronauts in outer space. The Russians used a pencil."

In most cases there are alternative ways for achieving an objective. Alternative approaches may be identified at the level of

- *intervention strategies*: for example, financial assistance / regulation / information and networking activities
- *instruments*: for example grants, interest subsidies or subsidised loans
- *channels* of intervention: direct support to main beneficiaries / support to intermediate actors such as NGO's
- *levels* of intervention: the level of intervention can be varied, for example, through the rate of assistance or through narrow/wide definitions of target groups.

An analysis of alternative delivery mechanisms will identify what options are available and compare them on the basis of chosen criteria. This should be done in order to:

- ensure that the **instruments chosen for the implementation of the intervention** are the most appropriate ones (in terms of effectiveness, efficiency or other chosen criteria), and to
- demonstrate to decision-makers why the proposed approach should be considered the "**best possible**" means to achieve the ends.

This part of an ex ante evaluation should also analyse what risks will be connected to the implementation of the intervention, in order to identify suitable courses of action to prevent or mitigate their impact. Different types and level of risk may become criteria for choosing one type of delivery mechanism rather than another.

An analysis of alternative delivery mechanisms should also address possible earlier critical evaluation findings concerning the effectiveness of the instruments used in earlier generations of the programme or in similar interventions elsewhere.

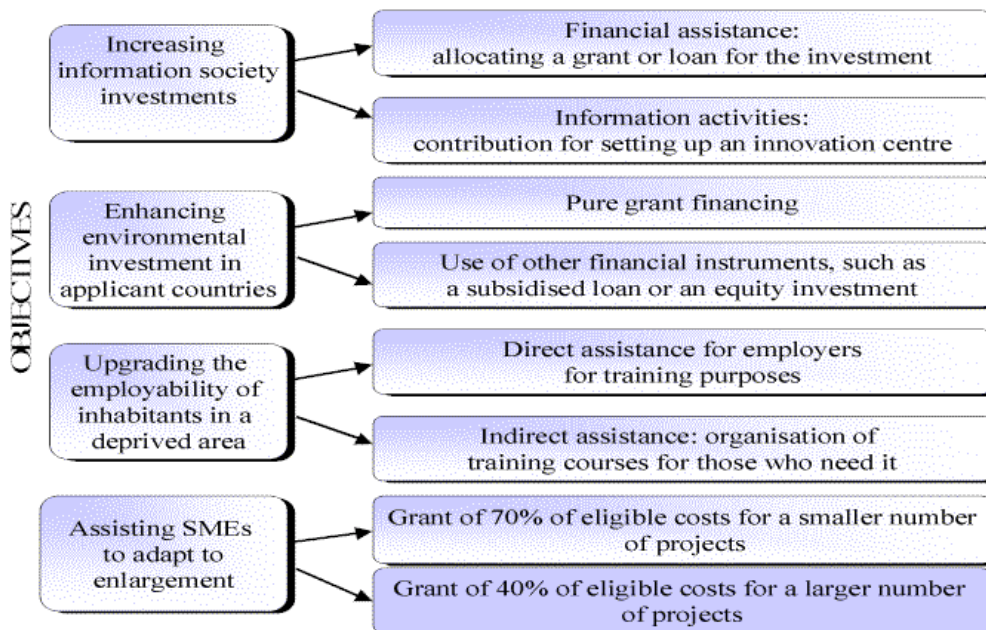
Practical steps

The analysis of alternative delivery mechanisms involves **identifying the options** and **comparing them** in order to decide - and to demonstrate - which is the one that is likely to be the most effective way of achieving the given objectives.

There is no standard procedure for the identification of options, but several methods can be used to help. Here are some possible techniques:

- Brainstorming sessions with experts of the field concerned and/or potential target groups. Involving outsiders (in addition to those directly involved in the programme) may provide a fresh look at possibilities. Using an external facilitator may help to achieve an innovative but disciplined process.
- Pilot projects. Encouraging innovative approaches through a short pilot phase may bring in new ideas that can then be developed into more programmatic instruments. Using this method will, however, require a relatively long period of time and it can only be applied if there is enough time to launch a search for new ideas.
- Analysis of earlier evaluation findings and other related studies. Recommendations presented in earlier evaluation reports may contain ideas that are worth developing even if they had not been realistic at the time they were first presented.

Examples of alternative instruments for delivering an objective:



After the **identification** of alternatives, they should be **compared**. A set of explicit criteria should be defined for this comparison. It is important that the criteria reflect the underlying needs/problems in the baseline situation, but also the realism (cost, risks, technical complexity etc.) of different options should be assessed. Some obvious criteria for the comparison are:

- Likely effectiveness of each option in reaching given objectives

- Level of costs related to each option (understood in a broad sense, not only financially)
- Associated risks; for example different exposure for risk for fraud in the different options.

The selection criteria should be tailored in such a way that they reflect essential aspects of the objectives, which the programme aims to achieve. If the programme intends, for example, to put in place new and experimental methods/ideas, one relevant criterion would be the capacity of the proposed delivery mechanism to capitalise and disseminate the results of individual projects.

A matrix approach, such as that shown below can be used to compare the relative merits of competing options. Even in the absence of hard data it should be possible to adapt a systematic approach to this comparison.

	Effectiveness High/Medium/ Low	Costs High / Medium / Low	Risks High /Medium / Low	Other criteria Positive/neutral/ negative	Overall assessment
OPTION 1					
OPTION 2					
OPTION N					

To give a more formal character to the overall assessment of different options, quantitative weights may be given to the different criteria. In this case the analysis will approach a *multi-criteria* analysis. However, even a qualitative assessment is usually a sufficient aid for decision making if presented in a systematic way.

Definition of risk and risk assessment

A **risk** is commonly defined as an event that can result in an undesirable or negative outcome (i.e. the non-achievement of the objectives set up). It is characterised by the probability of the event occurring and the resulting impact if it does occur. These two factors combine to produce a level of risk exposure. The aim of risk assessment is to identify such events (risk identification) and to assess the exposure (impact and likelihood).

To carry out an assessment, it is necessary to:

- identify the risk
- assess how likely that risk is to happen
- assess the potential impact to the programme if the risk identified were to occur

Risk management is a fundamental part of programme design. It is only when you identify and assess risks that you can build in counter-measures to stop them happening and contingency measures in case they do. The risk assessment might then lead to the conclusion not to proceed, or to proceed in a radically different way. Exposure to risk may also be a criterion for choosing or rejecting a particular delivery mechanism.

Risk identification and assessment is highly subjective. Formal, quantitative risk assessment may be possible on project level, in particular in technical projects, whereas in programme design risk identification and qualitative assessment of exposure is usually sufficient. Appropriate expertise may need to be sought. For example, when assessing the risk of fraud, this may be found from the internal audit function or the financial unit of the service.

Added value of Community involvement

Problem analysis and needs assessment
Objective setting and related indicators
Alternative delivery mechanisms and risk assessment
Added value of Community involvement
Lessons from the past
Planning future monitoring and evaluation
Helping to achieve cost-effectiveness

Definition and purpose

EU money, if wisely spent, should generate an “added value” over and above what would have been generated in the absence of public expenditure. The “European” dimension of this added value refers to the specific benefit that may result if the intervention takes place at EU level and not at the level of Member States or regions.

European Added Value (EAV) can be understood as the “value” resulting from an EU intervention that is additional to the “value” that would have resulted from intervention at national or regional level by public authorities and/or the private sector.

The purpose of the analysis of "European added value" (EAV) is to demonstrate that there is a rationale for taking action at the EU level and that the instruments used “add value” to what is already being done somewhere else, in particular at national or regional level. Therefore, the focus is not on the achievement of the programme objectives or of positive impact in a general sense, but on the particular role that intervention of the EU plays in this. **A basic condition for creating an “added value” is that the EU intervention is complementary to and coherent with other interventions. Only then can it produce synergy effects with them.**

EAV is related to a number of other concepts frequently used in the context of EU programmes and activities, such as subsidiarity, proportionality and additionality. These concepts are briefly presented in annex 3.

Different emphasis in different contexts

The need and focus of the EAV analysis varies between policy areas.

If a policy is defined by the Treaty as a Community Policy (such as the Common Agricultural Policy) there is no need to analyse whether there is a rationale for taking action at EU level. Nevertheless, even in these cases the particular instruments proposed should be analysed from the point of view of their added value. For example, in the case of promotion measures for agricultural products, certain instruments may be effective on the EU level, while others work better on national or local level.

In the area of external aid, the assessment of added value may need to focus on the complementarity and coherence and potential synergy effects on the international level. For example for a development aid programme, it is important to know what added value can be created in relation to other international aid schemes operating in the same area.

How to analyse European Added Value?

A practical way of carrying out the analysis of the EAV would consist of:

- Firstly, an empirical investigation of what measures are in place and what is already done in the same field in the Member States, the regions (if relevant) and also within the Commission (especially when different services are operating in closely related policy domains);
- Secondly, a comparison between these activities and the actions/instruments included in the proposed intervention, by paying attention to establish:
 - whether the intervention will be complementary (no duplication) and coherent (no undermining/possible contradictions) to the existing ones, and
 - what extent and what kind of synergy effects can be expected.

Both the complementarity/coherence check and the analysis of synergy effects should be carried out against the **background of different alternative delivery mechanisms** (see section 4.3. above) as these effects are usually specific to particular instruments or delivery mechanisms.

The table below illustrates with an example of RTD policy what types of added value can be achieved. A characteristic example for a (financial) synergy effect is the so-called "critical mass": a Community intervention, although limited in itself, puts national activities on a scale sufficient to achieve meaningful results.

Example of European added value (EAV): Research Framework Programmes

According to the Treaty, the Community shall carry out research activities “*complementing the activities carried out in the Member States*” and “*the Community and the Member States shall coordinate their research and development activities so as to ensure that national policies and Community policy are mutually consistent*” (Art 164 and 165, TEC).

In the preparation of the proposed 6th Framework Programme (2002-2006) the EAV criterion was addressed at three levels: overall approach, priorities and instruments.

Based on bibliometric measures, on national and European impact studies of past activities, and on prospective analysis founded on pilot-projects or similar experience from other policies, complementarity and synergy effects, which could not have been achieved without European support, have been identified:

A. Financial added value:

- Achievement of a critical mass in financial and human terms by concentration on few priorities of strategic importance to the Community (e.g. aeronautics)
- Financial leverage by way of co-financed trans-national projects
- Implementing research actions for which cost and scale are beyond the possibilities of a single country
- Contribution to the critical mass needed for the integration of research by use of new instruments (integrated projects, networks of excellence, joint implementation of national programmes)

B. Economic added value:

- Creation of new processes, products or services in strategic areas important to European competitiveness
- Stimulation of innovation, venture capital and competitiveness at European level
- Standards, measurements and tests, established in support of Community policies, contributing to reinforce the Internal Market
- Improved skills in enterprises and “internationalisation” of teams
- Access to new markets through the trans-national RTD projects

C. Social and environmental added value

- Trans-national problems addressed more effectively at EU level (e.g. BSE, ozone layer, vaccines...)
- Ethical reviews contributing to ensure the adherence to ethical principles in Community research activities, and developing codes of conduct
- Scientific advice jointly agreed at European level, contributing to active involvement of civil society or social and economic actors in policy formulation and implementation
- Reduced response times by increased flexibility of action needed following emerging scientific technological and socio-economic topical issues and challenges
- Increased mobility of researchers and development of human resources in research

D. Institutional added value

- Input to Community policies and regulations (agriculture, fisheries, environment, transport, etc)
- Impact of European research on European or national research policy decisions
- Sharing of best practices in programme and policy design and implementation at EU and national level

E. Cross-border/Trans-national co-operation and networking

- Extensive networking, world class capacity building and continuous transfer of knowledge by the structured bringing-together of excellent research teams
- More dynamic research environment in Europe : quicker publication, more frequent quotation and co-publishing
- Higher quality of research e.g. by combination of complementary expertise and infrastructures in different countries

Lessons from the past

Problem analysis and needs assessment
Objective setting and related indicators
Alternative delivery mechanisms and risk assessment
Added value of Community involvement
Lessons from the past
Planning future monitoring and evaluation
Helping to achieve cost-effectiveness

Purpose

"Don't repeat old mistakes, make new ones!"

Most programme proposals follow on from existing programmes, and many EU initiatives will have similarities to other programmes carried out by the Commission or other organisations. It is critically important to extract the relevant lessons from earlier experiences. The following important knowledge can usually be gathered from evaluation reports and related studies:

- Relevance of the existing strategy and possible needs for its amendment
- Effectiveness of existing delivery instruments
- Critical factors affecting the implementation of a programme
- Types of problems encountered while monitoring and evaluations were carried out.

Learning from ex post evaluation reports

A sequence of evaluation phases (ex ante, mid-term, final and ex post) in successive programme cycles often creates overlaps that have to be organised efficiently to avoid possible duplication of work. The basic principle involves the combination of evaluation work from one programme period to another. Usually, the relative continuity of actions programmed from one period to the next one makes it possible to use conclusions from the recent past evaluation exercise to assess the relevance of the new measures proposed.

The ex ante evaluation that prepares the adoption of a future programme should first look at the mid-term evaluation of the period drawing to a close. This mid-term evaluation usually has produced conclusions on the first years of activity of a programme. It can thus already say something about the relevance and effectiveness of chosen strategies and delivery instruments. It might also reveal something about the difficulties and problems affecting smooth implementation of the programme.

The ex ante evaluation should also look at the ex-post evaluation report of the period preceding the current one and possible thematic evaluations in the same policy area but also in other policy areas. The impacts of past interventions might

be similar to those under consideration. Moreover, some of the contextual factors might be same.

Learning from other sources

In addition to lessons learned from past evaluation practices, the use of other sources of information (such as studies and audit reports) is recommended. Examples of these can be found from the Member States, the Commission and other international organisations (for example studies by OECD and the World Bank, sector special audit reports by the Court of Auditors). For example when preparing an ex ante evaluation on a spending programme in Mozambique, it might be useful to review:

- Commission evaluation of EC Country Strategy for Mozambique 1996-2000
- Special report from the Court of Auditors on the management of the Commission's external aid programmes (in particular on country programming, project preparation and the role of delegations)
- World Bank analysis of the infrastructure in Mozambique

Planning future monitoring and evaluation

Problem analysis and needs assessment
Objective setting and related indicators
Alternative delivery mechanisms and risk assessment
Added value of Community involvement
Lessons from the past
Planning future monitoring and evaluation
Helping to achieve cost-effectiveness

Purpose

Arrangements needed for monitoring and evaluation of the future programme need to be planned already at the stage of ex ante evaluation. Reliable data on the implementation and immediate results of Community interventions is a basis for any serious evaluation of their impact. The purpose of this step is to ensure that

- adequate data will be available and that
- evaluations will be carried out on time and focussed on relevant questions.

Monitoring

Establishing clear objectives and indicators (see section 4.2), is the first stage for putting in place a good quality monitoring system, which should, in general, cover outputs and outcomes as well as the implementation process producing them.

Systematic collection of monitoring data should to start at the beginning of every intervention. Reconstituting missing data from the initial phase for the purposes of

later evaluation is cumbersome, expensive and usually unreliable. Establishing clear objectives and indicators, is the first stage in the process.

The ex ante process should address the following aspects of monitoring:

- Plan the necessary arrangements for collecting data on the foreseen indicators (both physical and financial) and other factors relevant for later analysis of achievement (such as statistical data on the areas of impact of the programme, market development, etc).
- Analyse the soundness and reliability of the proposed methods and concrete instruments for collecting follow-up data, storing and processing this data and ensuring its validity.
- Ensure that the monitoring system is fully operational from the outset of the programme and that adequate legal provisions are in place to ensure that the data collection from the Member States or from third parties can be undertaken reliably and smoothly.

Often it is necessary to clearly stipulate monitoring requirements in the legal basis for the action. This ensures that the Commission will have access to relevant data from the Member States or from intermediary organisations.

Example of monitoring requirements in a legal basis

Council regulation (EC) No 1257/1999 of May 1999 on support for rural development from the EAGGF:

Article 48, (1): The Commission and the Member States shall ensure effective monitoring of implementation of rural development programming,

(2): Such monitoring shall be carried out by way of jointly agreed procedures. Monitoring shall be carried out by reference to specific physical and financial indicators agree and established beforehand. Member States shall submit annual progress reports to the Commission.

(3): Where appropriate, monitoring committees shall be established.

Evaluation

Evaluation of Community programmes is essential and an actual legal requirement. The first stage is to establish clear objectives and indicators, as set out earlier in the document, against which future progress might be evaluated. The ex ante evaluation should then go on to analyse:

- what types (mid-term, final or ex post) of evaluations are needed and when
- what should be the main focus of these exercises
- who is responsible for carrying them out.

The ex ante exercise should pay particular attention to the overall approach and timing of each evaluation. When planning the different evaluations, it is important

to set up a clear link between the evaluation process, its results and decision-making. For example, an assessment of impacts should be left for the final and ex post exercises while the role of the mid-term evaluation is, among other things, to capture the first initial results. It should also be ensured that there is a clear understanding of who (Commission, Member State or a regional authority) is responsible for the different phases of the upcoming evaluations.

Examples of evaluation requirements in a legal basis

Decision No 1031/2000/EC of the European Parliament and of the Council of 13 April 2000 establishing the “Youth” Community action programme:

Article 13, (2): This programme shall be evaluated regularly by the Commission in co-operation with the Member States. This evaluation is intended to increase the effectiveness of actions implemented with regard to the objectives referred in Article 2. This evaluation will also examine the complementarity between actions under this programme and those pursued under other relevant Community policies, instruments and actions. In accordance with the criteria established, there will be regular external evaluations of the results.

(4): The Commission shall submit to the European Parliament, the Council, the Economic and Social Committee and the Committee of Regions:

- an interim evaluation report on the qualitative and quantitative aspects of the implementation of the programme by 30 June 2005,
- a final report on the implementation of this programme by 31 December 2007.

Council decision (2001/48/EC) of 22 December 2000 adopting a multi-annual Community programme (E-Content programme):

Article 6, (1): In order to ensure that Community aid is used efficiently, the Commission shall ensure that actions under this Decision are subject to effective prior appraisal, follow-up and subsequent evaluation.

(2): During implementation of projects and after their completion the Commission shall evaluate the manner in which they have been carried out and the impact of their implementation in order to assess whether the original objectives have been achieved.

(4): After two year from the date of the publication of this Decision and at the end of the programme, the Commission shall submit to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions an evaluation report on the results obtained in implementing the action lines. The Commission may submit, on the basis of those results, proposals for adjusting the orientation of the programme.

Helping to achieve cost-effectiveness

Problem analysis and needs assessment
Objective setting and related indicators
Alternative delivery mechanisms and risk assessment
Added value of Community involvement
Lessons from the past
Planning future monitoring and evaluation
Helping to achieve cost-effectiveness

Purpose and content

The Financial Regulation stipulates that Community funds must be used in accordance with the principles of economy and cost-effectiveness.

- The principle of *economy* means that the means for achieving fixed objectives are selected so as to minimise the costs.
- The principle of *cost-effectiveness* means that the benefits and longer-term impacts that result from an intervention justify the costs of carrying it out.

An ex ante evaluation should provide a reasonable basis for making these judgements. The purpose of this part of the ex ante evaluation is to analyse the different cost implications of the proposed option and to provide evidence, for example with the help of comparisons, on the cost-effectiveness of the proposed option.

All proposals with financial implications must also be accompanied by a financial statement that includes a detailed calculation of the financial and human resources to be allocated to the intervention. This is usually the task of those in financial and human resource units, in consultation with management, although an ex ante evaluation may provide useful elements for filling in the financial statement.

How to assess cost-effectiveness

A *cost-effectiveness analysis* consists of relating the effects of an intervention to the total amount of inputs (total cost) needed to produce those effects. The criterion for judgement is usually the cost per unit of outcome achieved (for example, the cost per job created or child fed). This unit cost is then compared to other interventions or to other methods for delivering the same outcome. Whether or not a programme is cost-effective depends on whether it outperforms other competing programmes in reaching given objectives for less cost.

For example, if the objective of an intervention is to reduce traffic accidents in a given area by a certain amount, an ex ante assessment of cost-effectiveness could involve comparing the costs and expected results of the following three options for action:

- a road safety awareness campaign
- building bridges to separate pedestrian and vehicle traffic
- introducing more traffic lights.

The level of cost and the expected level of results that can be achieved are obviously different in each of the three options. Their cost-effectiveness could be compared with the help of quantified estimates for the cost per number of accidents avoided in each case.

In reality, a calculation of cost-effectiveness ratios at the ex ante stage and at the level of a programme or policy proposal may be difficult, or may require too many and too uncertain assumptions to be useful. In particular, if the objectives of an initiative are multiple and not well specified in terms of expected results, it will be difficult to attribute costs to any comparable key impacts. Nevertheless, the clearer the specification of objectives and expected results, the easier it will be to assess the cost-effectiveness of the proposal.

However, understanding and explaining the consequences of the proposal in terms of different types of costs is more important than doing exact measurements and calculations. At the minimum, an ex ante evaluation should

- Present a broad estimate of the cost of the proposed intervention
- Ask if the objectives justify the cost - bearing in mind that ultimately this is a political judgement
- Ask if the same results could be achieved by a lower cost by using a different approach of other instruments, or if more or better results could be achieved with the same cost by using a different approach or other instruments.

These questions might lead to a re-assessment either of the objectives, of the action itself, of alternative delivery mechanisms, or any combination of them.

This part of the analysis can be combined with the comparison of alternative delivery mechanisms described in point 4.3.

Evidence for the comparisons can be drawn, for example, from earlier evaluations of similar interventions.

Types of cost that should be taken into account are:

- direct financial outlays (for beneficiaries or third parties) from the EU budget
- administrative costs for the Commission (technical assistance, informatics costs etc)
- human resources needed to manage the intervention.

The Financial Regulation and the Implementation Rules expect cost-effectiveness to be assessed from the point of view of the Community, that is, they look at the costs impacting on the EU budget as a result of carrying out the intervention.

A *cost-benefit analysis* would look at all the losses and gains for all parties concerned by the intervention. Even though a formal, full cost-benefit analysis is often not relevant in the preparation of Community initiatives, it may be useful to get a fairly detailed picture of the likely cost implications. This requires making at least rough estimates of the costs incurred for different parties involved. These costs should include:

- costs for the EU (financial, administrative, human resources)
- cost for the beneficiaries or target population (co-financing, administrative burden related to participation etc)
- costs for third parties (Member States, intermediary organisations)

ANNEX 1: CHECK-LIST OF EX ANTE EVALUATION

Ex ante evaluation is obligatory for all proposals occasioning expenditure from the EU budget. Its purpose is to ensure that adequate information on the points listed below will be available.

1. CONTENT OF EX ANTE EVALUATION

a) Problem analysis and needs assessment

- What is the problem to be solved and what are the main factors and actors involved?
- What is the concrete target group and what are its needs and/or interests?

b) Objective setting

- Have the general, specific and operational objectives been defined in terms of expected results?
- What indicators are planned for measuring inputs, outputs, results and impacts?

c) Alternative delivery mechanisms and risk assessment

- What alternative instruments were considered and why was the proposed one chosen?
- What risks are involved in the implementation of the intervention and what counter-measures have been taken?

d) Added value of Community involvement

- Is the proposed intervention complementary to and coherent with other interventions?
- Does it produce synergies with them?

e) Lessons from the past

- What evaluation, audit or study results/experiences of similar actions are available?
- How can these be applied to improve the design of the programme?

f) Planning future monitoring and evaluation

- Are the proposed methods for collecting, storing and processing the follow-up data sound?
- Is the monitoring system fully operational already from the outset of the programme implementation?
- What types of evaluations are needed and when should they be carried out?

g) Helping to achieve cost-effectiveness

- What are the different cost implications of the proposed option?
- Could the same results be achieved by a lower cost or could more or better results be achieved with the same cost by using different instruments?

2. WHEN SHOULD AN EX ANTE EVALUATION BE CARRIED OUT?

Ex ante evaluation can usually be carried out in parallel with or as a part of the programme design, feeding results in the preparation of the proposal. It should be started early on in the process when options are still open.

3. WHO SHOULD DO AN EX ANTE EVALUATION

In-house work, for example by a team including members from the responsible operative unit(s), from the DG 's evaluation function and from the co-ordinating function, is often a

good solution. Some parts (such as surveys of potential beneficiaries or organising workshops) may, however, be entrusted to an external expert.

ANNEX 2: THE COMMISSION COMMUNICATION ON EVALUATION (SEC(2000)1051)

The content of ex ante evaluation was outlined in the Communication of July 2000, which states that, as a rule, the preparation of proposals with budgetary and resource implications should include information on:

- future needs and future external environment;
- general and specific objectives, associated results and measures of achievement;
- assessment of options for intervention including appropriateness and quality of delivery mechanisms;
- value added by Community intervention;
- expected level of future results and associated costs in terms of operative credits and human resources;
- lessons learned from any past interventions, potential future risks and ways to reduce these;
- plan for monitoring and evaluation during the course of intervention.

The Communication on Evaluation emphasises that **the practical modalities for conducting an ex ante evaluation** should be decided in a pragmatic way, taking into account the real information needs in each situation:

“The form and method for conducting the necessary ex ante assessment needs to be decided case by case, taking into account the political context, time constraints and decision makers’ need for information. The scope of an ex ante assessment will depend, among other things, on the amount and quality of information available from earlier evaluations, studies or other sources, on the amount of expenditure and resources involved and on the type of the decision making process. Specific ex ante evaluation studies or needs assessments may be needed where important information is missing, while in other cases synthesising existing information and/or workshops clarifying programme logic will be more useful.”

ANNEX 3: EUROPEAN ADDED VALUE (EAV) AND OTHER RELATED TERMS

The concept of European Added Value is closely related to three other terms central to the EU policies: *subsidiarity, proportionality and additionality*.

Their general background is that the EU has to justify its actions in terms of the additional value they might have over the actions of individual Member States. This principle has been formally embodied in successive versions of the Treaties. At Maastricht, the general criteria of subsidiarity and proportionality as the principles governing EU activities were introduced.¹ These were later expanded in a specific protocol annexed to the Treaty.²

The principle of **subsidiarity** means that in areas, which do not fall within its exclusive competence, the Commission shall take action only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and they can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community. The principle of **proportionality** then states that any action by the Community shall not go beyond what is necessary to achieve the objectives of the Treaty. The protocol on the application of both principles provides, among other, guidelines to be used in examining whether the above-mentioned conditions are fulfilled:

- The issue under consideration has trans-national aspects, which cannot be satisfactorily regulated by action by Member States;
- Actions by Member States alone or lack of Community action would conflict with the requirements of the Treaty or would otherwise significantly damage Member States' interests;
- Action at Community level would produce clear benefits by reason of its scale or effects compared with action at the level of the Member States.

EAV is clearly related to the principles of subsidiarity and proportionality, which are the broad guidelines governing all EU actions. The main difference is that the principles of subsidiarity and proportionality focus on whether an action at EU level is justified in a legal sense, whereas the concept of EAV has a more economic content. The main interest is in the conditions under which an “added value” at European level can be achieved and what kind of “added value” is/will be produced by a given EU action. A second difference is the fact that, a priori, the concept of EAV is not limited to the relation EU/Member States/regions like the subsidiarity principle. In the case of external relations, for example, the complementarity of EU development aid to other donors' actions and the added value that might be achieved vis-à-vis these is also relevant.

The principle of **additionality** is used in the context of EU Structural Funds. The financial support given from the Funds may not replace public or other equivalent structural expenditure by the Member State in order to achieve a genuine economic impact. Some detailed rules on how to achieve this are set in the legal base, together with the obligation that the additionality shall be verified at three points during the programming period: ex-ante, mid-term and ex post.³ Therefore, the principle of additionality corresponds closely to that of complementarity, but is more specific due to its limitation to the financial support in the context of EU Structural Funds.⁴

¹ Art. 3b of the Treaty establishing the European Community (Maastricht consolidated version; Art. 5 in the Amsterdam consolidated version of the Treaty)

² Protocols annexed to the Treaty on European Union and to the Treaty establishing the European Community – Protocol (No 30) on the application of the principles of subsidiarity and proportionality (1997).

³ Art. 11 of Council Regulation (EC) No 1260/99 of 21 June 1999 laying down general provisions on the Structural Funds

⁴ In the area of EU Research and Technological Development Policy (RTD), the term “additionality” is also used, but not specifically mentioned in the legal texts. The “Community added value” is explicitly mentioned as selection criteria for proposals for indirect RTD actions in the Fifth Framework Programme (Art. 10 of Council Decision No 1999/65/EC of 22 December 1998). In the context of assessing this Community added value, “additionality” is one aspect amongst others, but means more or less the same than in the Structural Funds, i.e. that corresponding RTD actions have to demonstrate that public funds are not substitute corporate investment in research and development, but are in some ways additional to it.

