

Traditional and new tools and methods for the preparation of the next European Framework Programme (2006-2010)

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I R&D policy-making at EU level

1 Traditional toolkit for S&T policy-making

The traditional toolkit for S&T policy-making includes a wide range of instruments:

- Comparative analysis of S&T input/output indicators
- Foresight and technological assessment analysis
- Benchmarking of national R&D policy actions and instruments
- Growth and competitiveness analysis
- Consultation of the stakeholders
- Evaluation of the management and the impact of past R&D programmes

Recently, this toolkit has been expanded with ‘extended impact assessment’ and ‘ex ante evaluation’. Both activities are compulsory for the preparation of the European Commission’s proposal for the 7th RTD Framework Programme.

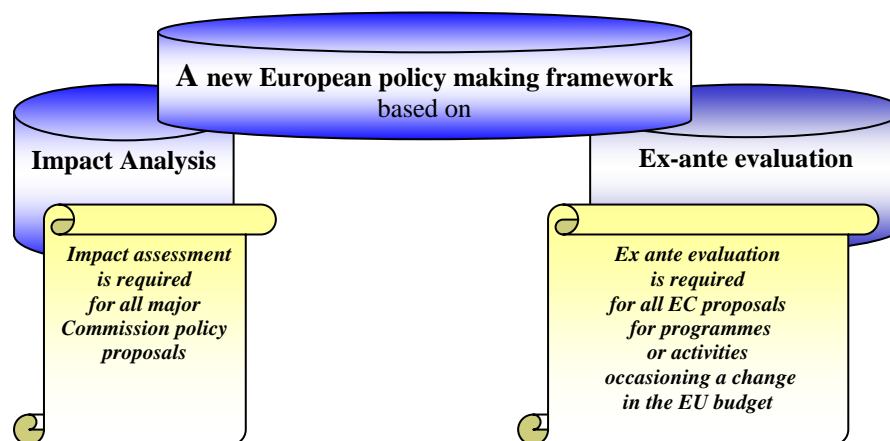


Figure 1: A new European policy making framework

2 Origin and development of the new European approach

2.1 Origin of impact assessment

Since the middle of the 1990, a number of initiatives on improving the quality of EU regulations have been taken. Civil society - in particular the concern of NGOs and private sector organizations regarding the assessment of the environmental and competitiveness impact of policy measures – as well as the pioneering work by certain Member States, like the United Kingdom and the Netherlands, have contributed to the recognition of the need for

better lawmaking and impact assessment. At the European level, discussions on subsidiarity and proportionality triggered the debate on better governance.

2.2 Origin of ex ante evaluation

The general requirement for carrying out ex ante evaluations is based on the principle of sound financial management, more specifically, Article 27 of the Financial Regulation (Council regulation of 25 June 2002) and Article 21 of its implementation rules (Commission regulation of 23 December 2002).

Annex 1: Article 27 and Article 21

2.3 Development of impact assessment at the EU-level

At the Lisbon European Council (March 2000), the EU set itself the goal of becoming by the year 2010 the world's most competitive and dynamic knowledge-based economy. There as well as at Santa Maria de Feira the important role that better regulation and new coordination methods could play in achieving this new European goal was clearly established. The Lisbon Council asked the Commission and the Member States "to set out by 2001 a strategy for further co-ordinated action to simplify the regulatory environment, including the performance of public administration, at both national and Community level."

At a 6-7 November 2000 meeting in Strasbourg, the Ministers for Public Administration from the EU Member States approved a resolution on improving the quality of regulation within the EU and requested the creation of a High-Level Advisory Group (HLAG) consisting of regulatory experts from the Member States and the Commission. In July 2001, the European Commission (EC) presented its *White Paper on European Governance*. And on 13 November 2001, the HLAG on better regulation, the so-called Mandelkern Group (named after its Chairman), submitted its final report. In November 2001, the European Parliament strengthened the requirements of better lawmaking even further by adopting a resolution stressing the primacy of political accountability behind legislative action.

The requirement of impact assessment on EC proposals and simplification of the regulatory environment was agreed upon at the Göteborg and Laeken European Councils. In July 2002, on the basis of the recommendations made, the EC decided to act in response to the strategy mapped out by the Lisbon European Council and adopted three communications for better lawmaking. Impact Assessment is an action of the Better Regulation Action Plan (see document COM(2002)278). The process is set out in the Commission's Communication 2002/276 on Impact Assessment.

3 Impact assessment

3.1 What is impact assessment?

Impact assessment involves analysing the likely economic, social and environmental impacts of all major public policy proposals. The main objectives of impact assessment are improved quality and coherence of policy design; increased transparency of the policy making process; improved cooperation between public authorities, private sector and civil society; better

communication towards and information for the public and the stakeholders on the ex-ante impacts of public decisions; more public commitment to the protection of the environment; and to reduce the burden of regulation, which has been estimated to fall in the range of 2-5% of GDP in Europe.

3.2 How is impact assessment implemented at the European Commission?

In principle, all initiatives and proposals that Directorate-Generals (DGs) wish to include in the Annual Policy Strategy (APS) in February and/or later in the Commission’s Legislative and Work Programme (WP) in November are subject to an impact assessment (IA).

There are three stages in the IA process. First, the lead DG assesses the need for an IA analysis on the basis of a proportionate analysis. Second, the policy unit of the lead DG prepares a **Preliminary Assessment**, a short statement of 2-3 pages, giving a first overview of the problem identified, possible options and sectors affected and indicating whether the lead DG recommends a more extensive impact assessment. Third, on the basis of the preliminary assessment statement the Commission decides in its APS decision and/or WP which proposals will require an **Extended Impact Assessment**. The extended impact assessment, typically a 40-60 page summary report (plus detailed annexes where appropriate), involves a more in-depth analysis of the potential impacts on the economy, society and the environment.

An Extended Impact Assessment is obligatory if the proposal will result in substantial economic, environmental and/or social impacts on a specific sector or several sectors, *or* a significant impact on major interested parties, *or* represents a major policy reform in one or several sectors.

3.3 The process of Extended Impact Assessment

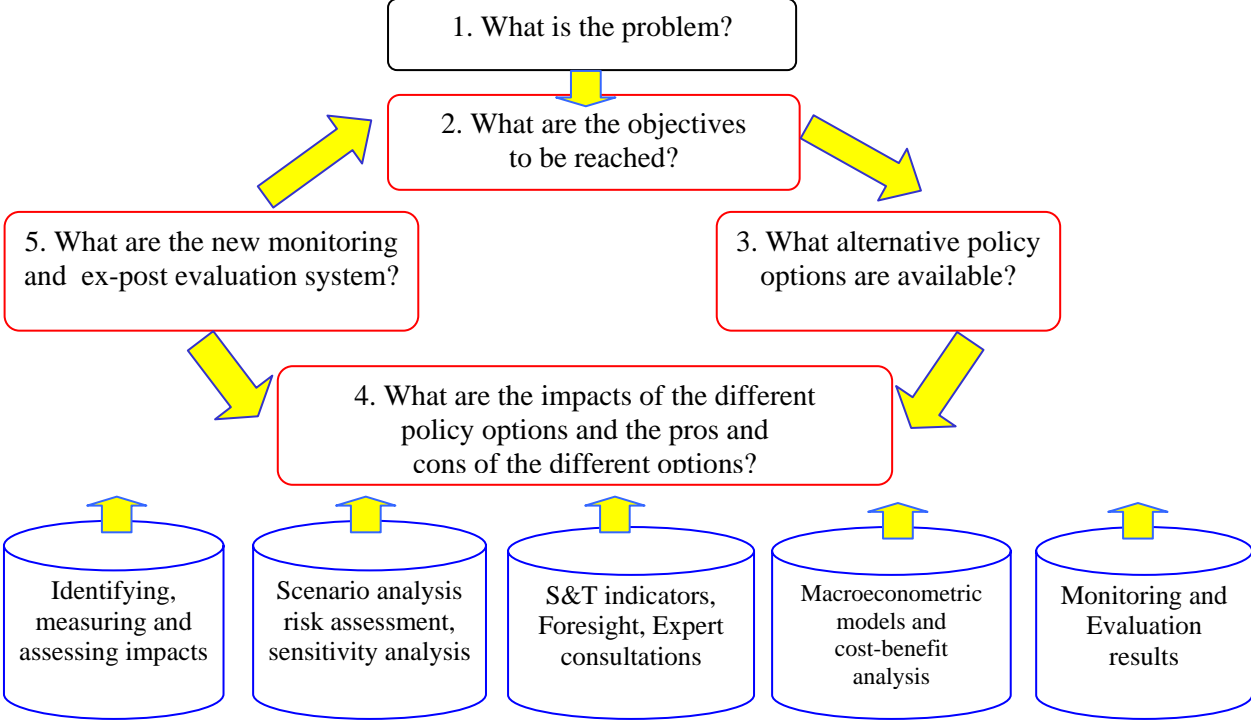


Figure 2: The process of Extended Impact Assessment

There are five basic questions in an Impact Assessment. While the basic questions are always the same, the specific questions and the analysis may differ on a case-by-case basis.

Question 1: What is the problem being addressed?

Digging into the problem is necessary to identify and develop the most effective policy action.

Questions which can help to unravel and to define the problem are:

- What is the problem in this policy area in social, economic and environmental terms?
- Who are the main actors?
- Who is the concrete target group and what are its needs?
- Who or what else would be affected by any action to solve it?

Question 2: What are the objectives of the proposal?

High-level policy goals need to be translated into more tangible and measurable objectives.

Questions which can help this translation process are:

- What is the overall policy objective in terms of expected impacts?
- Has account been taken of other Community objectives?
- What are the general, specific and operational objectives and expected results?
- What indicators are planned for measuring inputs, outputs, results and impacts?

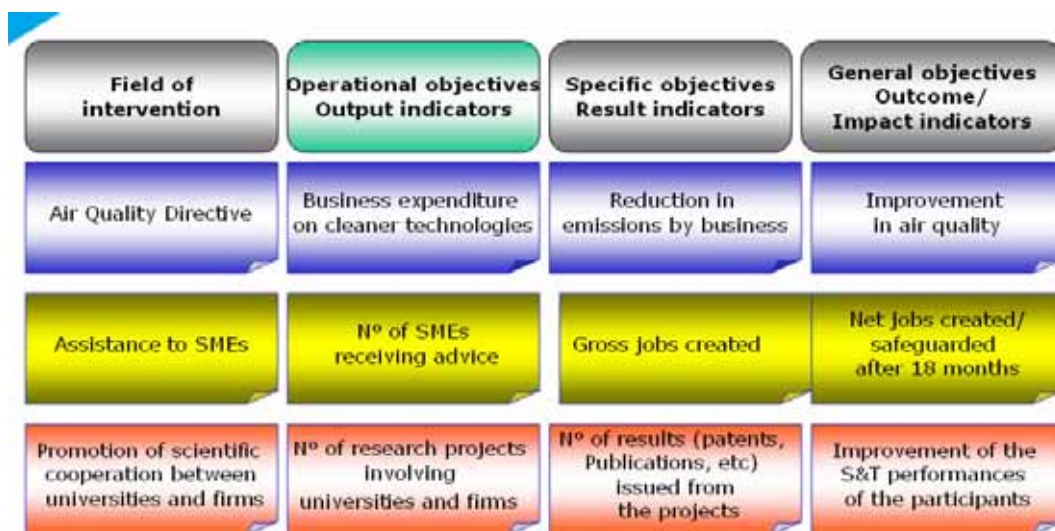


Figure 3: Examples of objectives and indicators

Question 3: What are the main policy options and alternative delivery mechanisms?

When considering ways to reach the objective, one should keep an open mind. One should look at a wide range of policy instruments to find the best way to achieve the objective.

- What is the proposed policy chosen to achieve the objectives?
- What other policies were considered?
- What other instruments, besides an expenditure programme, were considered?

Question 4: What are the expected impacts of each option considered?

This exercise should result in a comprehensive picture of the potential effects of the different policy options.

The main questions to be addressed here are:

What are the expected economic, social and environmental impacts of each option?

Are there potential conflicts between social, economic and environmental impacts?

What are the impacts on particular social groups, economic sectors or regions?

What are the impacts outside the EU?

How are the impacts expected to manifest themselves over time?

What are the results of any scenario, risk or sensitivity analysis undertaken?

Will the proposal have economic impacts, such as:

- Economic growth
- Price level and stability
- Effects on public authority budgets
- Human capital formation and employment
- Economic cohesion
- Innovation
- International performance
- Market structure and competition
- Microeconomic effects on enterprises
- Effects on households

Will the proposal affect any aspects of the environment, such as:

- Air, water, soil or climate
- Renewable or non-renewable resources
- Biodiversity, flora, fauna
- Land use
- Natural and cultural heritage
- Waste production/generation or recycling
- Human safety or health
- The likelihood or scale of environmental risks

Will the proposal have social impacts in the following areas:

- Social cohesion
- Employment quality
- Health systems and security
- Social protection and social services
- Consumer interests
- Education
- Equality of opportunity and entitlement
- Culture
- Governance and participation
- Fundamental human rights

Annex 2: Examples of EIAs conducted by EC services

4 Ex ante evaluation

Ex ante evaluation is required by the Financial Regulations for all expenditure programmes and focuses on the value for money of financial programmes, i.e. the cost-effectiveness of EU expenditure. The ex-ante evaluation will not be a separate report, but will be integrated into the Impact Assessment report of FP7.

The main objective of ex ante evaluation is to check the use of budget appropriations in accordance with the principle of sound financial management, namely in accordance with the principles of Economy, Efficiency and Effectiveness.

The main requirements for an ex ante evaluation are: to set up specific, measurable and relevant objectives to be achieved; to identify the indicators needed to measure them; to analyse the added value of Community involvement; to perform a risk analysis (linked with the proposals and the alternative options available); to perform a cost-effectiveness analysis and to set up the monitoring and ex post evaluation system.

II Preparation of the 7th Framework Programme

1 Timing and calendar

The preparation of the 7th Framework Programme started early 2004 with the following steps:

February 2004: The Commission's Proposal on the new Financial Perspectives for the EU was adopted.

April 2004: A Task Force was created for the preparation of the extended impact assessment and ex ante evaluation of the 7th Framework Programme.

June 2004: The Commission's Communication on future research policy was published.

June 2004: The Commission launched an important debate on the way forward for the 7th Framework Programme.

July 2004: The Stakeholders' consultation was launched.

Mid 2005: The final proposal and impact assessment/ex ante evaluation of the FP will be submitted to the Commission. After the adoption, the co-decision procedure will start.

2 Objectives and challenges

2.1 EU RTD policy objectives

Several milestones have shaped the EU RTD policy objectives as we know them today:

EC Treaty (Article 163):

- Strengthening the scientific and technological bases of Community industry and encouraging it to become more competitive at international level
- Promoting all the research activities deemed necessary by virtue of other Community policies

Lisbon strategy:

- EU to be the world's most dynamic and competitive knowledge-based economy by 2010
- Increasing research excellence
- Creating the European Research Area (ERA):
 - Greater coordination of research policies and activities

- 6th FP conceived and implemented as an instrument of ERA
- Improved environment for innovation and commercialization

Barcelona objectives:

- Increasing research investment towards 3% of GDP by 2010, with 2/3 financed by industry

2.2 Challenges and problems for RTD policy at the world and European levels

At the *world level*, RTD policy is confronted with several problems and challenges:

- Increasing global competition (economic and technological)
- Knowledge industries and IPR are becoming more and more important in the economic growth and development
- New players “High-Tech-Low-Cost” (HTLC) like China and India (outsourcing)
- Rapid development and convergence of new S&T areas (nano-bio-info-cognitive sciences...)
- Aging population in advanced countries versus young population in less developed countries
- S&T progress remains the unique solution to face world challenges like climate change, health problems...

In addition, *EU* RTD policy is confronted with several specific challenges and problems:

- European competitiveness and economic performances
- “European Paradox” still remains valid at least for some MS and/or for some sectors
- Investment gap in R&D
- Fragmented and not fully coordinated European research system
- Increasing R&D costs, critical mass
- Brain drain and mobility of researchers
- Attractiveness of S&T education
- Coherent and coordinated public policies

3 Commission’s policy proposals

Proposals for the next budgetary period 2007-13 (February 2004):

- Sustainable development, competitiveness and the Lisbon agenda as priorities
- Significant increase (doubling) of research budget

Commission’s communication on future research policy (June 2004):

- Focusing future research support on key challenges for Europe
- Continuing and reinforcing existing activities
- Developing new approaches
- Launching a debate on the way forward for the 7th Framework Programme

Commission’s policy proposals - Key axes:

In order to increase the impact of Europe’s S&T policy, the proposal is to organize it around six major axes: collaborative research, human resources, research infrastructures, European technology initiatives and basic research.

4 Preparation of the impact assessment and ex ante evaluation of the 7th FP

Actions taken so far in the preparation of FP7:

June 2004: The Communication “Science and technology, the key to Europe’s future Guidelines for future European Union policy to support research” (COM (2004) 353 final) was adopted in June 2004.

May 2004: The extended impact assessment started in May 2004.

Several parties and sources of information contribute to the EIA report:

- DG Research services
- Research DGs (ENT, FISH, INFSO, TREN)
- External Experts
- Framework Programme 5-year assessment
- Synthesis of past Framework Programme ex-post evaluations
- 3rd European Report on S&T Indicators (2003) and Key-figures ERA 2003/2004

A range of impact studies have been launched, which will be fed into the EIA report:

- Econometric study estimating the impact on European growth, employment and trade of the Framework Programme
- Econometric study estimating the added value provided by EU R&D programmes
- Analysis of Framework Programme participation data:
 - Trends across Framework Programmes
 - Linking to bibliometric data
 - Linking to patent data
 - Linking to regional data
 - Linking to innovation data (CIS III)
- Analysis of recent trends in European and global high-tech trade

July 2004: The Stakeholder consultation was launched in July 2004 and will be closed in November 2004

Annexes

Annex 1: Article 27 and Article 21

Article 27(4): "in order to improve the decision-making, institutions shall undertake both ex ante and ex post evaluations in line with guidance provided by the Commission. Such evaluations shall be applied to all programmes and activities which entail significant spending and evaluation results disseminated to spending, legislative and budgetary authorities".

Article 21 (1): "all proposals for programmes or activities occasioning expenditure or a reduction in revenue for the budget shall be 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 achieved;
- 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 for the cost-effectiveness principle;
- h) the monitoring system to be set up".

Annex 2: Examples of EIA conducted by EC services

Lead DG	Title	WP
ADMIN	Industrial Security Regulation	2003/ADMIN/8
AGRI	Council regulation on support for rural development	2004/AGRI/003
AGRI	Report CMO bananas	2004/AGRI/001
DEV	Negotiating mandate for a new international agreement on tropical forests	2003/DEV/7
EAC	Community action programme in education TEMPUS III post 2006	2004/EAC/018
EAC	Community action programme in education and job training	2004/EAC/014
EMPL	Integration of persons excluded from the labor market	2004/EMPL/011
EMPL	Prevention of violence at work	2004/EMPL/008
ENTR	Directive on the reduction of the level of pollutant emissions from motor vehicles	2003/ENTR/61
ENTR	Directive on human tissue engineering and tissue-engineered products	2003/ENTR/37
ENTR	European Parliament and Council Regulation on medicinal products for pediatric use	2003/ENTR/59
ENV	Environment & Health Action Plan 2004-2010	2004/ENV+/006
ENV	Soil Thematic Strategy	2004/ENV/002
ENV	Thematic Strategy on Pesticides	2004/ENV/003
FISH	Council Regulation establishing a Joint Community Inspection Structure for fisheries	2003/FISH/9
INFSO	Communication on interoperability in digital TV, MHP standards	2004/INFSO/001
JAI	Framework Decision on the penalties in the MS in the fight against counterfeiting	2004/JAI+/006
MARKT	Directive on reinsurance	2003/MARKT/21
SG	Review of the Sustainable development strategy	2004/SG/010
SG	The next financial perspectives post 2006	2004/SG+/011
TAXUD	Home State Taxation pilot scheme for SMEs	2004/TAXUD/007
TREN	Regulation on the quality of passenger air transport services	2003/TREN/43
TREN	Revision of the regulation on computerized reservation systems	2002/TREN/29
TREN	Regulations revising the third air transport package	2002/TREN/28