

Strategy & Technology

Evaluation and Monitoring of Technology Programmes

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Definitions

Ex ante evaluation = Assessment of proposals for funding decisions

Ex post evaluation = Assessment of the results of the programme

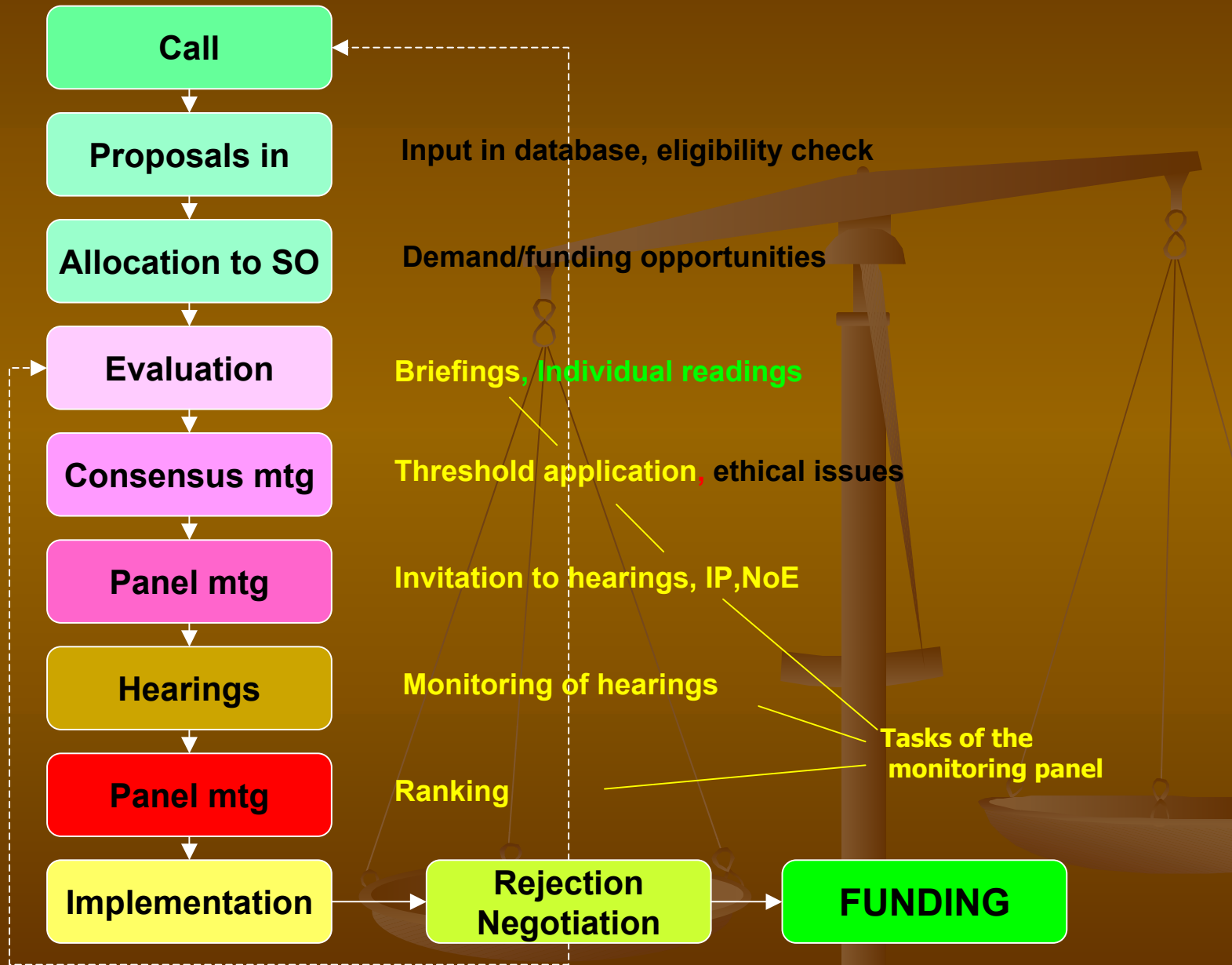
Monitoring = Scrutiny of the legal and formal aspects of project assessment

Terms of Reference for Monitoring of IST Call5

The observers, working in a Monitoring Panel, will give independent advice:

- on the conduct of, the fairness and equity of the evaluation;
- on “best practice” and on ways in which cases close to the boundary of acceptability are dealt with;
- on respect for procedures and ways in which procedures could be improved;
- on the degree to which the recommendations from the previous IST Call Monitoring Reports have been taken into account in the planning for this and future Calls;
- on the preparations for the evaluation including selection of evaluators and allocation of proposals to them;
- on the evaluation criteria used and the way in which evaluators apply these criteria; and
- on the process of reaching a consensus on evaluation marks and proposal ranking (whether in meetings or through electronic means).

The Evaluation Process of EU-FP



Participation

The panel notes that the participation in the programme by SMEs has remained remarkably steady throughout FP6: 85% of the proposals have SME participants; 25% of the proposers were SMEs; and 20% of the requested funding was for SMEs.

The panel notes that the participation of New Member States seems not commensurate with the scientific and technological potential of these countries, with only 11.3% of participants in proposals from New Member States and 5.7% of proposals co-ordinated by partners from these states.

Participation of '3rd countries' in the programme
Statistics show that only 4.3% of the total number of proposals have partners are from Third Countries. Only 0.3% of proposals are co-ordinated by partners from Third Countries

Participation of Industrial Experts in the Evaluation

Statistics on actual participation as evaluators show that 42% in Call 5 come from some form of private sector organisations, including 19% from private companies. The comparable figures from Call 2 and Call 4 show no significant improvement through FP6.

The statistics do not allow differentiation of SMEs from the rest. Taking the figures from the evaluators' feedback forms (Annex 2), there were 13.3% evaluators from SMEs in Call 2, 7.7% in Call 4 and 8.4% in the current Call 5. However these feedback forms cover only 63% of the total number of evaluators and, due to restrictions of privacy regulations, it is not clear whether the returns are skewed with respect to the different categories of respondent.

The percentage of SMEs therefore has to be treated with caution.

A General Comment

In the opinion of the Monitoring Panel the present process is executed almost as well as it could be. We could always continue to fine-tune it to make it even better, but we are unlikely to find any measures that would make a *significant* impact on the efficiency or the effectiveness of the present form of process.

Evaluations have been monitored several times before: the Monitoring Panels of Calls 2 and 4 of FP6 have presented about 80 recommendations, from which the Commission has approved about 50 - the rest being impossible or against the presently accepted rules of the Commission.

Recommendations

Recommendation 1: Evaluate options for alternative evaluation processes for FP7

Evaluation processes used in the FP6 are well-established and managed professionally. The Panel suggests consideration of fundamental changes to the evaluation process if significant improvement in the total process is to be achieved.

Recommendation 2: Achieve better coverage of Strategic Objectives: portfolio management

The current policy of treating each proposal entirely on its own merits, without consideration of strategic coverage should be re-assessed, with greater emphasis given to realisation of the desired portfolio.

Recommendations

Recommendation 3: Establish a common policy on the approach to the technical 'specific foci' of the Call.

A common approach should be established across the various units on how any additional guidance on the interpretation of the call should be conveyed to both proposers and evaluators.

Recommendation 4: Increase participation of industrial and business expertise

A key objective of the evaluation is a balanced participation of academic, public sector and private business experts, including experts from SMEs.

In order to increase the participation of informed industrial evaluators, consider a powerful awareness campaign for FP7 via European and national industry associations and selected top level executives to promote the benefits of the EU FP. Special attention should be paid to engagement of industry in New Member States.

Recommendations

Recommendation 5: Continue and extend sharing of best practice

There is still scope for improvement in the consistency and efficiency with which Consensus Meetings are managed.

There is also considerable scope for sharing of best practice in the arrangement and management of Panel Meetings, where the Monitoring Panel observed wide divergence in practice.

- The panel observed a few extremely well-conducted
 - consensus, panel and hearing meetings.
- These meetings could serve as best practice models.
- A selected group of POs could formulate the best practices.

Recommendation 6: Use ICT

Tools should at least include evaluation planning tools, automated checking of proposal content for correctness and plausibility, meeting management tools, notebooks and 'beamers' so all participants in a meeting can share a clear picture of the proceedings, and – for FP7 – electronic copies of proposals, to facilitate reference to proposals by evaluators while minimising environmental impact.

Specific Observations

Calibration

Calibration with regard to understanding of the evaluation criteria

'Relevance' continued to give evaluators most difficulty.

'Impact' was almost as difficult, and even 'potential' was problematic

Calibration with regard to understanding of call intentions

Evaluators consideration of the 'specific focus' of a call varied considerably.

This significantly affected their judgement of 'Relevance' and to a lesser extent of 'Impact'

Self-calibration in scoring

The evaluators often felt that the S&T excellence has too low weight in the final score.

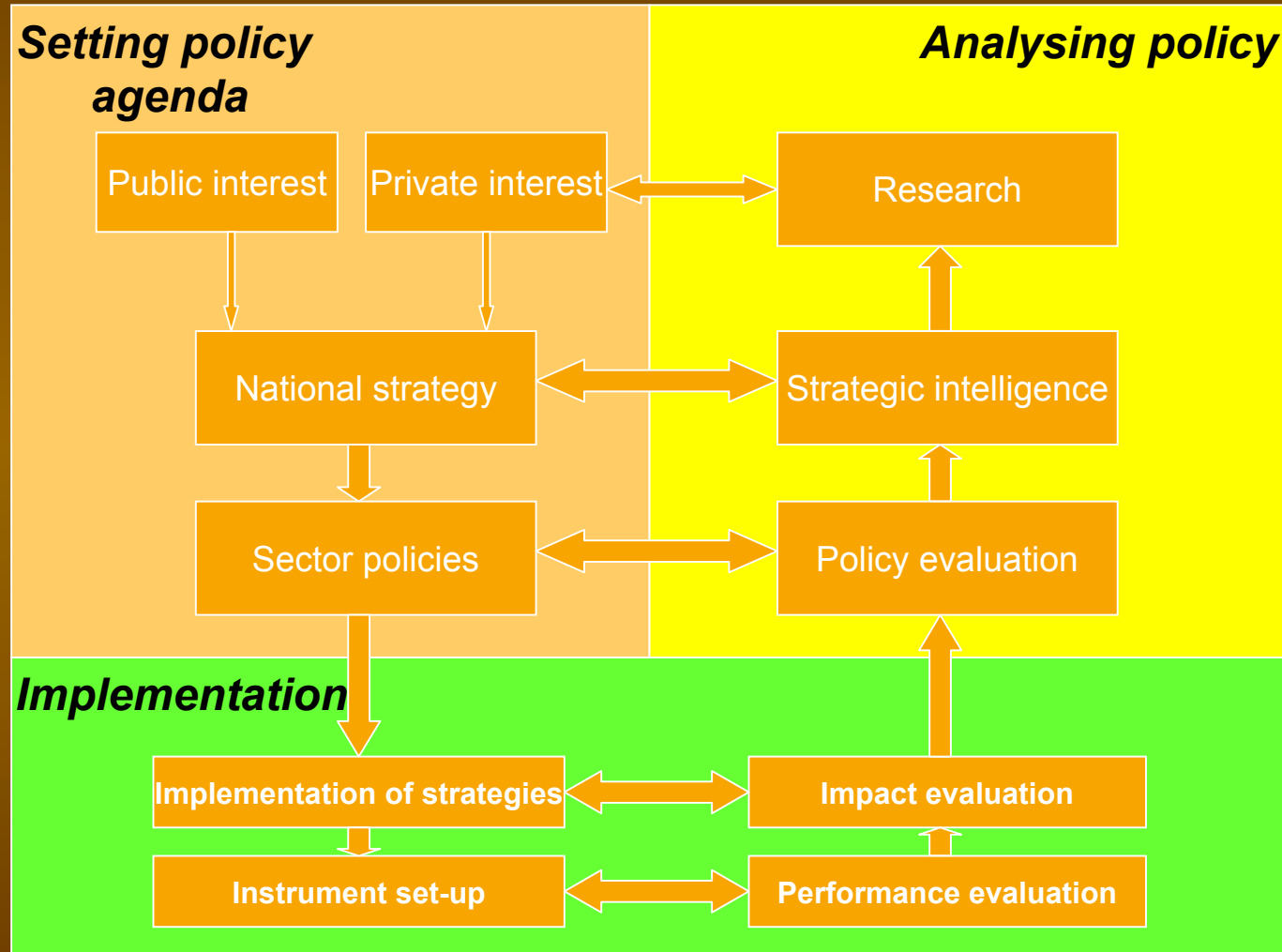
Points for Further Consideration

- alternative approaches to evaluation
- achievement of strategic objectives
- best practice in evaluation
- choice of evaluators
- streamline the process
- revise the evaluation criteria
- use of ICT
- participation of New Member States
- participation by 3rd countries
- follow-up of previous recommendations

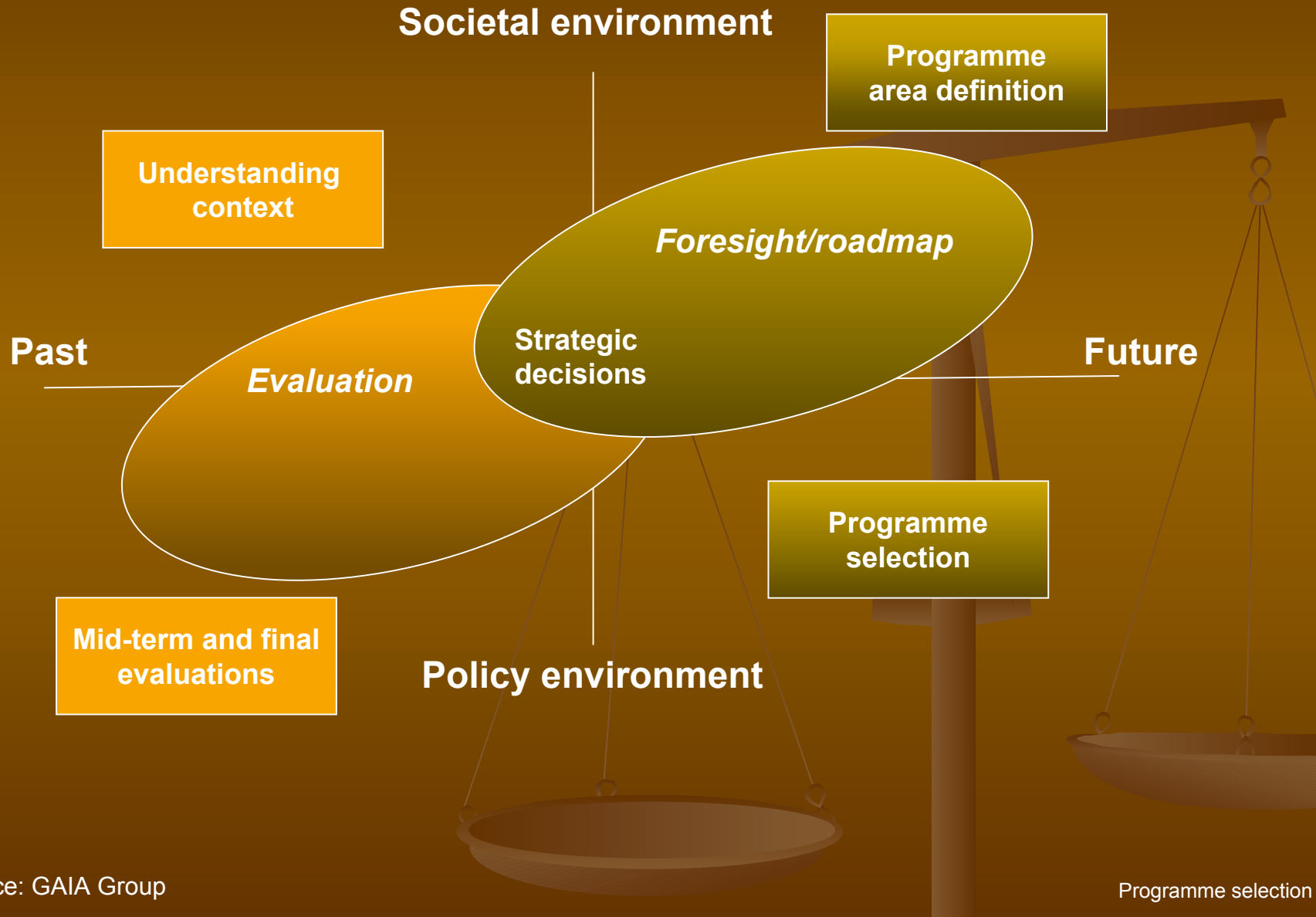
Conclusions Regarding a National Programme Evaluation Process

- Secure the transparency of the criteria
- Secure the clarity of criteria
- Secure the calibration of criteria application
- Implement a wide use of ICT
- Problems in the initial phase of evaluation will cumulate at the end
- Keep the objectives of the call clear
- Keep monitoring and evaluation separate
- Monitoring and ex post evaluation should be carried out by neutral parties
- Ex ante evaluation and the financial decisions should be linked
- Participation in international projects should be evaluated and monitored like the national ones keeping in mind the national benefits, objectives and demands
- Cost effectiveness should not be forgotten

Circulation of Innovation Policy



Technology Programme Selection and Evaluation



The Selection of Areas for R&D Funding

Administration

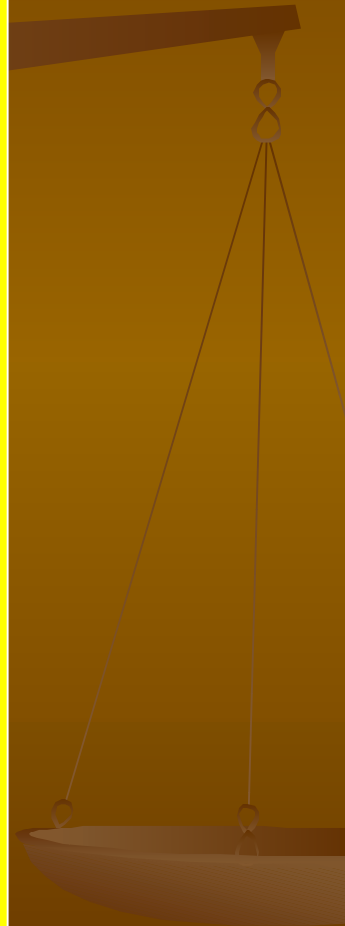
- social needs
- white spots on technology map
- emerging technologies
- globalisation challenges
- emerging legislation

Industry

- globalisation challenges
- technology needs
- clustering needs
- new business models

Research

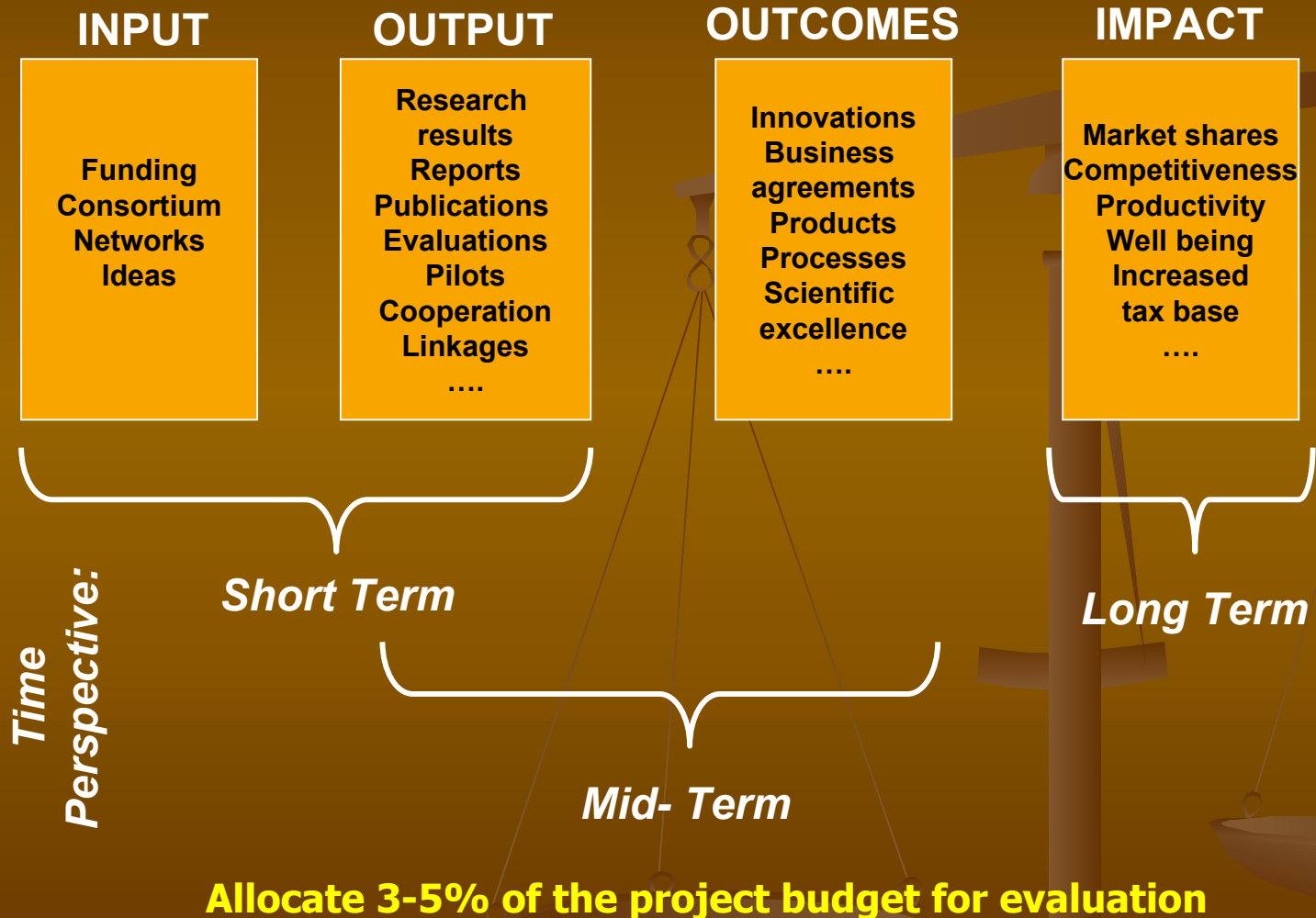
- utilizing the strengths of research
- improving the weaknesses of research
- improving the industry cooperation
- facilitating the technology transfer
- improving the infrastructure of research



The General Objectives of the National Technology Programmes

- To promote the industrial competitiveness to keep up with the global market change
- To give input to the industrial innovation process
- To create new knowledge to fulfil the needs of research, Industry and society
- To create the critical mass and centres of excellence in important technological areas
- To enhance the co-operation between industry and universities and research institution
- To promote international co-operation
- To support research education and to educate internationally oriented research managers
- To enhance the research and high-tech image of the country

Evaluation Schemes



Evaluation Development of National Technology Programmes

1. Generation

- performance
- feedback to participants
- peer review

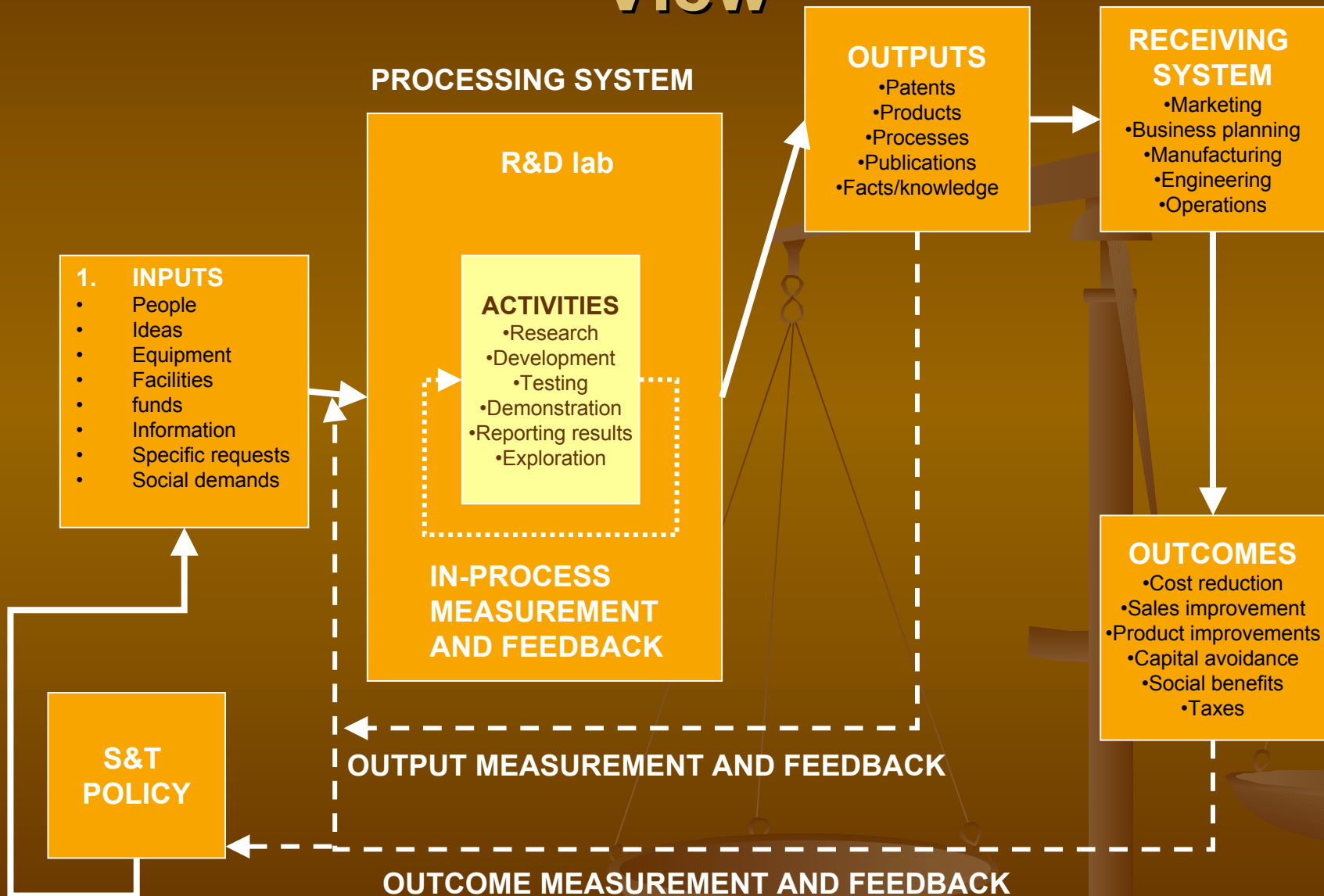
2. Generation

- distinguish between output, outcome and impact
 - internal performance supporting monitoring
 - external impact evaluation for program design
 - budget reservation for evaluation

3. Generation

- impact modelling and thematic evaluations
- support of renewal of technology programme instrument
 - better support for policy planning

Innovation Flow from R&D Point of View



Assessing the Company

Financer's Point of View

MULTIPLE = EXIT VALUE : ENTRY VALUE

SPEED OF R&D

- REVENUES
- PROFITS
- MARKET VALUE
- ETC.

QUALITY OF R&D

- MARKET POSITION
- PROJECT PORTFOLIO
- COMPETITIVE POSITION
- ETC.

[Multiple >> 1]

Tekes Targets and Measurement (example)

Internationalisation of innovation	
TARGET	MEASURE
<p>The innovation environment in Finland offers efficient conditions for companies and research units to apply and to utilize existing international knowledge and to network with high level international partners. This gives them opportunities to create new knowledge and business opportunities.</p>	<ul style="list-style-type: none">•The export of high and high medium level industries•Patents approved in US•R&D financing by EU•Growth components (WEF) of five leading countries

Conceptual Technology Programme Evaluations in 2002- 2003 (1/2)

Programmes for new business operating models

- to develop new business concepts
- based on value chain analysis
- three programmes from construction and manufacturing

Programmes for innovations in changing business regulations

- deregulation (electricity) and increasing regulation (environmental)

Industrial cluster programmes

- activating companies to R&D, networking, industrial R&D strategy, strong regional and SME approach
- "evolution of sector programmes"- cluster performance

Conceptual Technology Programme Evaluations in 2002- 2003 (2/2)

Programmes for innovation and commercialisation

- programmes with new product and new business goals
- user- and exploitation oriented
- programmes for pharmaceuticals, diagnostics computing etc

Targeted programmes

- problem oriented focussed and well planned
- "hands-on manager" of projects
- programmes for plastics, paper and machinery clusters

-Programmes looking for technology synergy

- technology and knowledge transfer oriented
- cross industrial programmes

The background of the slide is a monochromatic blue image of a mountainous landscape. It features several layers of rolling hills and mountains, with the foreground hills showing more detail of forested slopes. The sky is a pale, hazy blue. The overall effect is serene and professional.

Thank you for your kind attention!