The European Council of Town Planners

Regional spatial development strategy - Innovation in decision-making

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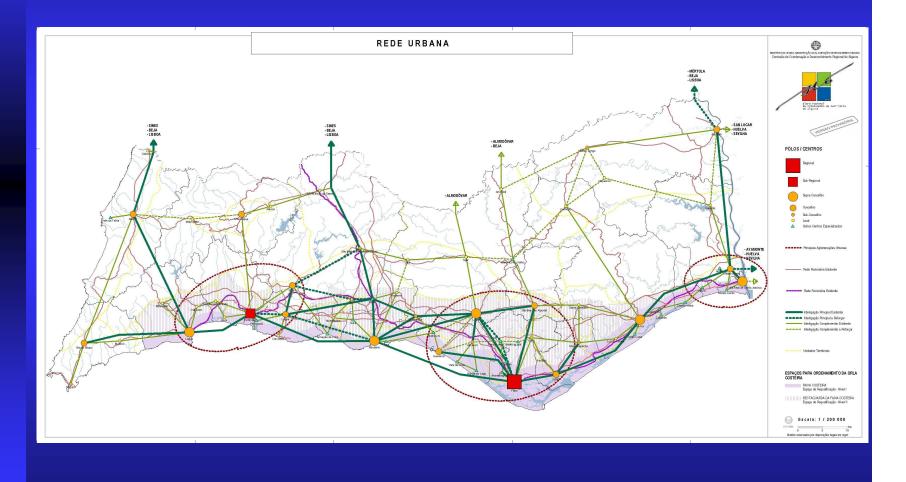
Methodological steps towards the formulation of a Development Strategy

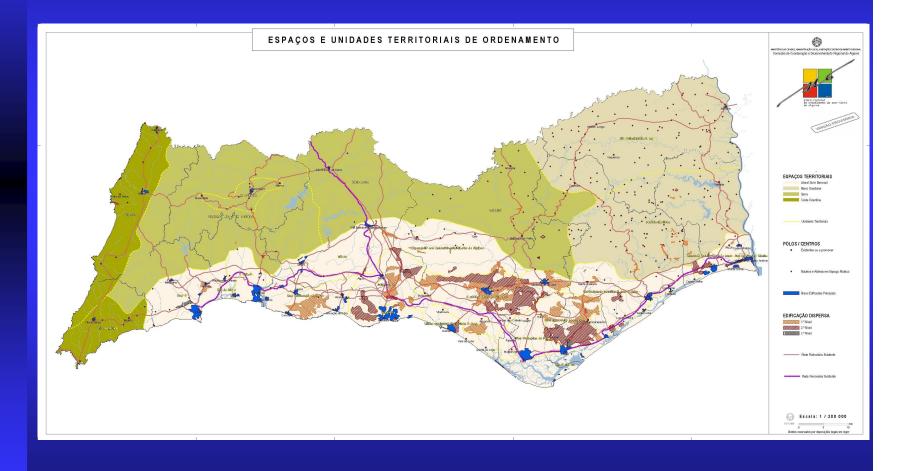
Decision Areas and Subjects in Algarve Regional Plan

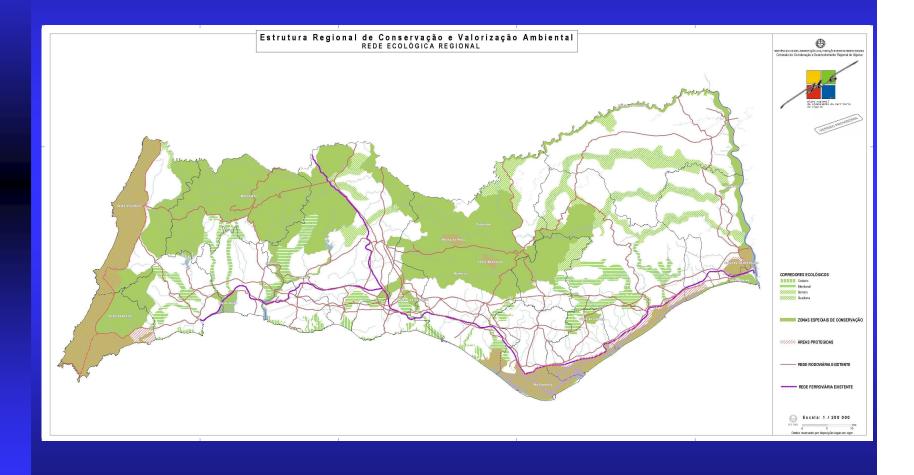
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Environmental Conservation and Environment
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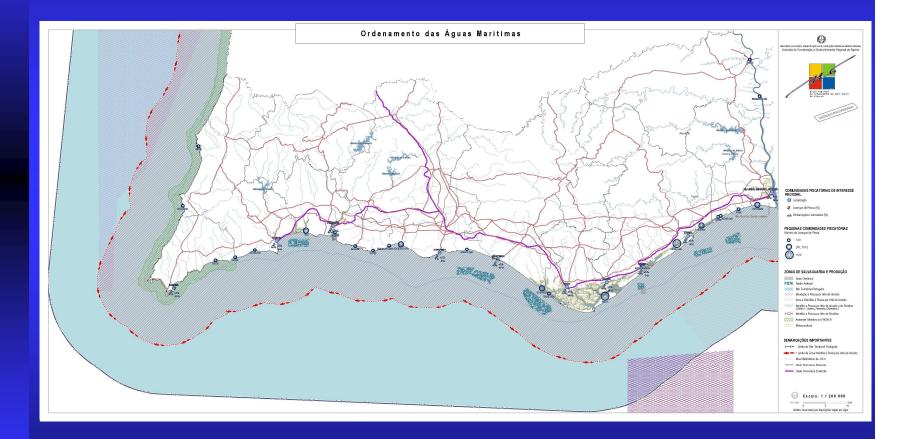
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 Entrepreneurship
 Panel E – Economic, Social and Territorial Cohesion

Education and professional training, Health, Security, Culture, Social Exclusion









Identifying and ordering the policy measures adequate to achieve the proposed Vision

Definition of the political measures – Key issues

Which policy measures are more adequate to achieve the Vision, in territorial, social and economical, and in environmental terms ?

Which are the differences between the different policy measures in what concerns their expected contribution towards the achievement of the fundamental objectives ?

Which are the differences between the different policy measures in what concerns implementation / doability risks ? Which options should be priorities ? Identifying and ordering the policy measures adequate to achieve the proposed Vision

Definition of policy measures – key-definitions Formulation of a complete set of policy measures Strategic analysis of policy measures *versus* fundamental objectives

Benefít analysis – doability of policy measures

Definition of strategic alternatives

STEP 1

Identification of objectives and of the initial version of the policy measures

OBJECTIVES

• Identification of objectives for each area consistent with the Vision

• First formulation of the packages of policy measures based on:

- Diagnostic
- Vision
- Benchmarking

Formulation of policy measures

For each Decision Area:

1. – Definition of the fundamental objectives (based on the Vision and the Diagnostic)

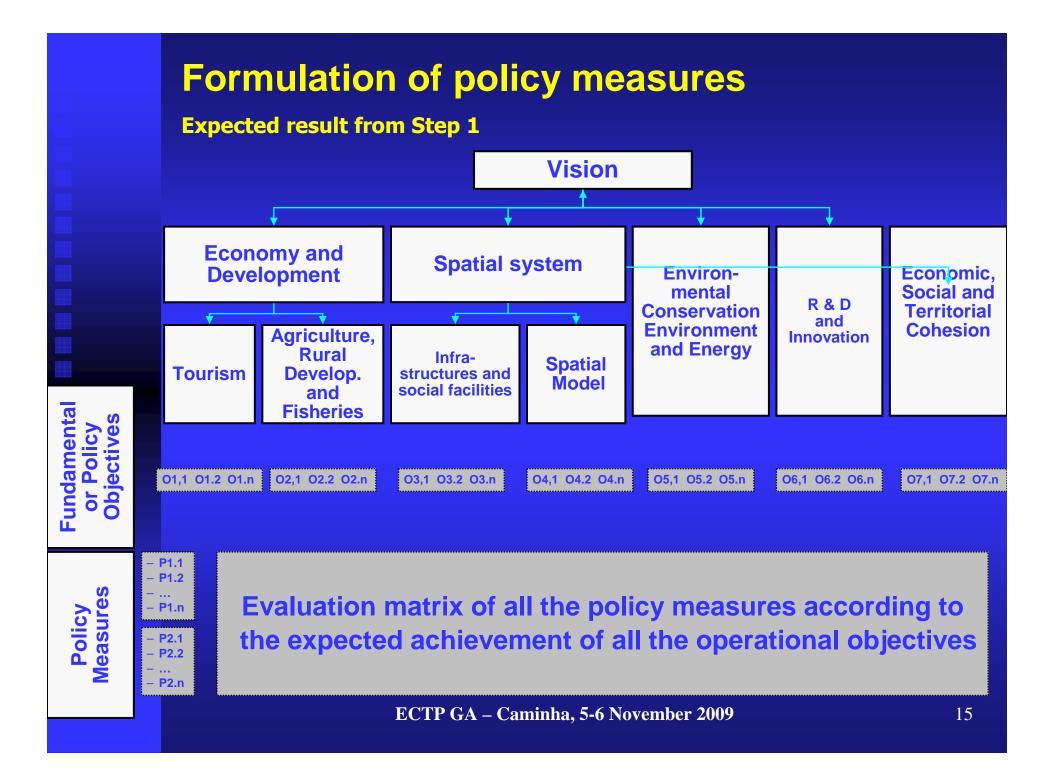
2. – Definition of the operational objectives (through the development of the fundamental objectives)

3. – Identification of 'levers' (people, material and immaterial resources, institutions and implementation models) considering the objectives

4. – Iterative formulation of policy measures and their packages, including illustration of concrete actions (coupling to 'levers')

Formulation of policy measures





Identification of objectives and of the initial version of the policy measures

STEP 1

OBJECTIVES

Identification of objectives for each area consistent with the Vision
First formulation of the packages of policy measures based on:

- Diagnostic
- Vision
- Benchmarking

Pre-validation of objectives and measures within the planning team

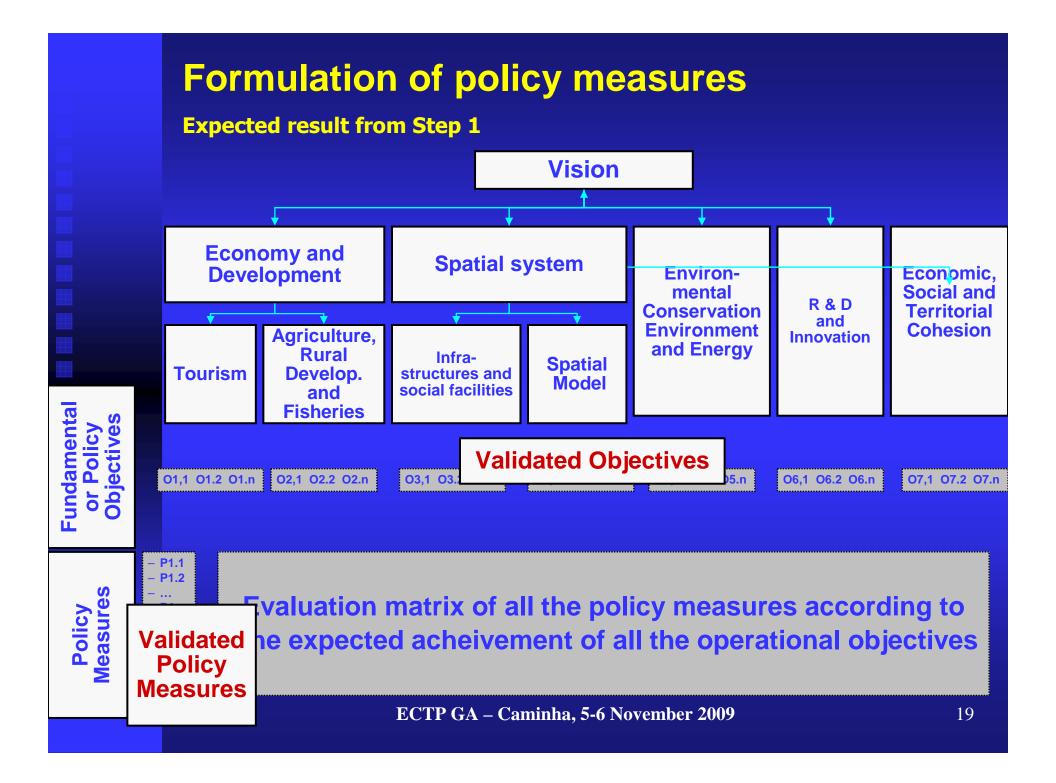
STEP 2

OBJECTIVES

- To ensure that no objective, measure or lever has been forgotten
- Which policies to implement immediately
- Which are the constraints applicable to some measures (legal and institutional framework,...)

	STEP 1		STEP 2		STEP 3	
	Identification of objectives and of the initial version of the policy measures		Pre-validation of objectives and measures within the planning team		Validation of objectives and measures with key- representatives (1st Panels)	
OBJECTIVES • Identification of objectives for each area consistent with the Vision • First formulation of the packages of policy measures			OBJECTIVES • To ensure that no key issue has been forgotten • Which policies to implement • Which are the constraints applicable to some measures		OBJECTIVES • Validation of objectives and measures to achieve them • To ensure a shared understanding of the objectives and measures to be evaluated	

- To improve the understanding about the specific scope of each policy measure:
- **1. Fundamental (or policy) objective**
- 2. Operational objective(s) which detail the above
- **3.** Description of the policy measures
- 4. List and description of the concrete potential actions
- **5.** Expected impacts

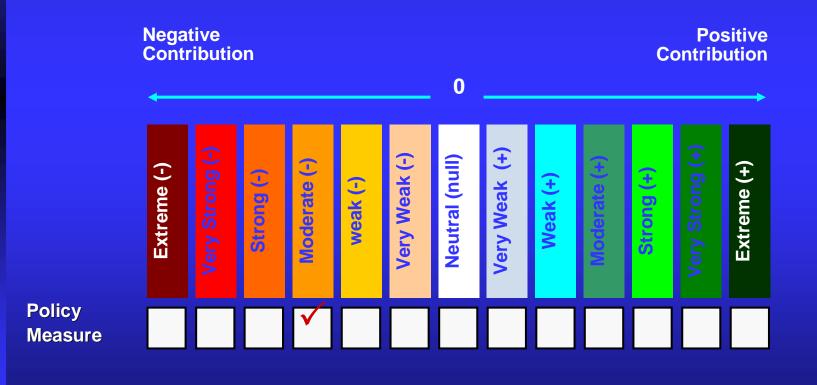


STEP 1	STEP 2		STEP 3		STEP 4
Identification of objectives and of the initial version of the policy measures	Pre-validation of objectives and measure within the planning team	s ar re	alidation objectives od measur with key- presentat (1st Pane	s es ive	Decision Conferences by panels (2nd round)
 OBJECTIVES Identification of objectives for each area consistent with the Vision First formulation of the packages of policy measures 	OBJECTIVE • To ensure that r key issue has be forgotten • Which policies t implement • Which are the constraints applicable to so measures	no • V een o no to • T s u u me th a	DBJECTIVE alidation of bjectives and neasures to chieve them o ensure a hared nderstanding ne objectives nd measures e evaluated	d g of	OBJECTIVES • Value judgements: • Expected Achievement of the objectives • Doability of each measure • Cross effects • Relative weights of objectives

Direct Impacts and cross impacts:

The expected achievement of an objective by a measure of the same scope and subject panel corresponds to a direct impact, and is placed in a diagonal cell in the evaluation matrix. The expected achievement of an objective by a measure of a different scope and subject panel corresponds to a cross impact or effect, and is placed in a non diagonal cell in the evaluation matrix.

Evaluation scale for value judgements:



Decision conferences:

Evaluation, by the panel, of the expected contribution of each policy measure to the achievement of each objective of each Decision Area. The policy measures to evaluate are:

- the ones specific to the subject of each panel

- those within the scopes of all the other panels

As measures which cross effects according to all key experts are contained between *negative moderate* and *positive moderate* are excluded from further evaluation

Decision conferences:

A large dispersion of value judgements of a policy measure implies the need of further discussion among the experts about the reasons for such differences, in order to reduce the divergence of opinions through new value judgements

Evaluation by the panel of the relative weights of the fundamental objectives in order to establish their relative importance within each Decision Area

Decision conferences:

Evaluation by the panel of the doability of each policy measure. The level of doability of each policy measure is evaluated in qualitative terms, considering its technical, financial, institutional, and political feasibility.

Debate and formulation of recommendations about the more attractive policy measures, considering their joint benefits and their doability

MACBETH methodology:

The policy measures are evaluated in pairs.

Based upon the qualitative judgements by the experts of the planning team, for each sub-set of policies, the method automatically generates ratings for the policy measures. Each rating measures the atractability of each measure in terms of its contribution to the achievement of each objective. If necessary, the ratings may be adjusted.

MACBETH methodology:

The different fundamental objectives of each Decision Area are weighted, in order to reflect their relative importance for the achievement of the corresponding Area in the Vision.

The criterion of doability is not weighted in the panels, but by the expert group of the Planning team, in the last step of this process.

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Identification of objectives and of the initial version of the policy measures	Pre-validation of objectives and measures within the planning team	Validation of objectives and measures with key- representatives (1st Panels)	Decision Conferences by panels (2nd round)	Strategic Decision Conferences - Planning team
 <u>OBJECTIVES</u> Identification of objectives for each area consistent with the Vision First formulation of the packages of policy measures 	 <u>OBJECTIVES</u> To ensure that no key issue has been forgotten Which policies to implement Which are the constraints applicable to some measures 	 <u>OBJECTIVES</u> Validation of objectives and measures to achieve them To ensure a shared understanding of the objectives and measures to be evaluated 	OBJECTIVES • Value judgements: • Expected Achievement of the objectives • Doability of each measure • Cross effects • Relative weights of objectives	OBJECTIVES • Review of the results from the Decision Conferences • Objective weights • Doability weights • Selection of measures

The computing of the strategic weights between Decision Areas is based upon the weighting of the fundamental selected objectives (one by Area)

1. – To scale the relative weights within each Decision Area decided by the panels so that the maximum 'swing' is 100.

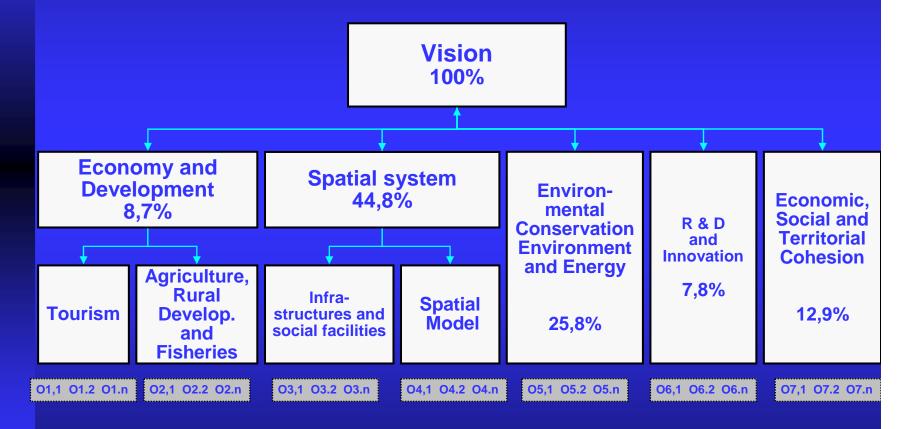
2. – To determine how the 100 weights of each Area compare to each other (in pairs) – determination of the cross weights

The computing of the strategic weights between Decision Areas is based upon the weighting of the fundamental selected objectives (one by Area)

3. – To scale the weights of the objectives within each Decision Area, multiplying each one by the cross weight of the corresponding selected objective

4. – The final strategic weights are thus obtained, based upon normalized weights

Resulting strategic weights for the components of the Vision e Decision Areas of the Strategy



Ratings of policy measures

After the definition of the strategic weights, the ratings of the policy measures become available as criteria to support the final decision process

Descriptor of the political cost

The mitigation of DOABILITY issues may be suggested during the conference and its results may be incorporated in the Plan and its implementation programme

Implementation of policy measures

Establishing priorities – considering the *ratio impact/effort of each policy, together with policy options*

Determining resource allocation: budget(s) and agents

Programming actions (very short, short, medium and long terms)

Implementation programme – establishing priorities First priority - High achievement level and highly doable Second priority - Average achievement level and highly doable **Third priority -** High achievement but difficult to implement (high effort and/or cost) Fourth priority - Average achievement and difficult to implement

 Implementation programme – Examples from Algarve
 First priority – Integrated management of water resources
 Second priority - Management plans for Natura 2000 sites
 Third priority - Reduction of catchment in fisheries
 Fourth priority – Spaces for inter-municipal cooperation

- Bana e Costa, C.A., 2001. The use of multicriteria decision analysis to support the search for less conflicting policy options in a multi-actor context: case-study. Journal of Multi-Criteria Decision Analysis. 10, 111–125.
- Bana e Costa, C.A., Beinat, E., 2005. Model-structuring in public decision-aiding. Working paper LSE OR 05.7, London School of Economics, London.
- Bana e Costa, C.A., De Corte, J.M., Vansnick, J.C., 2004. MACBETH. Working Paper LSE OR 03.56, London School of Economics, London.
- Bana e Costa, C.A., De Corte, J.M., Vansnick, J.C., 2005. On the mathematical foundations of MACBETH. *in* Figueira, J., Greco, S., Ehrgott, M. (eds) Multiple Criteria Decision Analysis: State of the Art Surveys. Springer, New York, pp. 409–442.
- Belton, V., Stewart, T.J., 2001. Multiple Criteria Decision Analysis: An Integrated Approach. Kluwer Academic Publishers, Boston, USA.
- Brugha, C.M., 2000. An introduction to the priority-pointing procedure. Journal of Multi-Criteria Decision Analysis 9, 227–242.
- Keeney, R.L., 1992. Value-Focused Thinking, a Path to Creative Decision making. Harvard University Press, Cambridge, MA, USA.