ESPON 2013 Programme

SPAN-3

Spatial Perspectives at Nuts-3 Level

project 2013/2/6

Inception report

May 2009

1. SPATIAL SCENARIOS

The general goal of strand 2 in ESPON 2013 Programme, namely Targeted Analysis based on User demand and in particular of tender 2013/2/6 concerning "Spatial scenarios: new tools for local-regional territories", is interpreted as follows:

- firstly, to **show how the general ESPON approach to spatial analysis can be useful to local policy makers** in the interpretation of challenges and trends at the scale of specific territories – regions, provinces, cities;

- secondly, taking advantage of some direct and motivated requests, to **build new methodologies and tools which could provide support to policy makers for quantitative assessment and foresight**, starting by an overview on the entire EU territory. This task - which regards functions which are close to basic research - was always accomplished by the ESPON Programme, though with the necessary caution and wisely balancing costs and benefits, given the general applied research nature of the ESPON engagement;

- thirdly, to provide **new evidence on territorial relationships** (rural-urban, small-medium-large cities, centre-periphery at the regional and macro-regional scale), through the use of the above-mentioned quantitative tools, and in particular the territorial elements that allow a better performance of regional economies confronted with the challenges of globalisation;

- fourthly, to develop interesting and **stimulating partnership processes** between scholars, local-regional policy makers and European functionaries in charge of EU regional policy.

The present research team finds these general goals appealing and stimulating, potentially apt to suggest new research fields, to develop new interpretations of local trends thanks to the EU-wide perspective and to device new policy strategies for local and regional development.

1.1. Spatial scenarios: the general approach.

Following directly the specifications given in the terms of reference, the specific goal of the project is **to develop regional forecasting methodologies and tools, appropriate to the regional-local scale but consistent with a general EU-wide approach**, developing a deep synergy with the stakeholder consortium.

The general approach will be the one developed by ESPON 3.2. project: updated, improved, specified at a finer territorial scale, adapted to the needs of local policy makers.

In particular:

A. Concerning methodological innovations:

A1: transfer of the ESPON 2006 methodology of the "Spatial Scenarios" project to territorial scales at (and probably below) NUTS 3. This task will be achieved through a double integrated methodology, namely:

- a **qualitative methodology** addressed to the inspection of long term **scenarios**, starting from the expected driving forces that will shape future development of European regions; and
- **a quantitative methodology**, concerning the development of a new econometric tool capable of transferring the logics and the working of the MASST model (Macroeconomic-social-sectoral-territorial model, utilised in 3.2. Project) from the NUTS 2 level to NUTS 3. **The sub-model will be called MAN-3**: **Masst-At-Nuts-3. It will be developed fully inside this research project**, with reference to the **three countries** represented by the stakeholder, namely Spain, France and Italy – countries for which a consistent and abundant data-base exists at Nuts 3 level.

A2: adaptation of thematic scenarios to the local-regional scale. This task will be accomplished by updating **some of the thematic scenarios** developed in 3.2. Project, those in which present evolutions have determined new possible bifurcations in the development trend of European regions, and namely:

- **the global economic and financial scenario**, with the present crisis touching the financial market but increasingly also the "real" markets, the role of Sovereign Funds of some major developing countries, the apparent absence of a new economic driving force in terms of aggregate demand in advanced countries (after the demand for "new economy" and "building and construction" products, both terminated in a financial and speculative "bubble");
- **the role of the emerging economies:** important changes are apparent in the evolution of the economic structure and behaviour of at least some of these countries (namely the BRICs: Brazil, Russia, China, India, plus the oil producing countries), hugely impinging on the development path of advanced countries: the lower impact of low-cost production (that maintained global inflation very low in the 2000-2006 period), with increasing production prices and re-evaluation strategies of the currencies; some new engagement of some countries in advanced production; deep engagement of some countries (namely China and Russia) in a policy of global financial expansion, with off-shore take-overs and acquisitions, sometimes through Sovereign Funds;
- **the energy and oil price scenario,** with the present ups and downs that require a new "fine tuning" of the preceding scenarios developed some years ago;
- **the new emerging role of the rural areas,** producing increasingly agro-products for energy production (biomass), new environment-friendly agricultural products (organic and biological products, zero-kilometre products encouraging peri-urban agricultural areas) and representing an increasingly powerful life-style for "repentant-urbanites" and second homes holders;

The adaptation of previous qualitative reflections to the more disaggregated territorial level will not be a problem, as those reflections were always developed for territorial typologies that do not coincide with (NUTS 2) regions: a constant

attention was devoted to specific typologies of cities, wide quasi-homogeneous territorial belts like coastal areas, mountain areas, river-basins, transportation axes.

A3: Adaptation of integrated scenarios to local-regional scale. The three integrated scenarios will be retained, but **will be updated** following the new reflections on the thematic scenarios, illustrated in the previous point.

For the qualitative integrated scenarios presently, the main challenge is to deliver messages in the context of a deep economic and social crisis likely to ensure compatibility and convergence between measures to be adopted in the short and medium term to overcome the crisis and the long-term objectives of territorial development (sustainable development, competitiveness of cities, territorial and socio-economic cohesion etc).

In this respect, it is essential to take into account the global context in which the crisis has emerged and its possible evolution as well as a number of macro policies (economic, social, technological, environmental), together with alternative possibilities to conceive them. A particularly important aspect is the interplay between macro-policies on the one hand and regional/local policies applied to urban systems and cities on the other.

The emergence of the crisis has de facto introduced an important differentiation of drivers and evolution paths: on the one hand those which are likely to continue independently from the crisis and, on the other, those which are strongly affected by the crisis or which have been generated by it. The second group requires an exploratory approach in the scenarios, while the impacts of the first group are better known (see ESPON project 3.2). The interplay between the two groups is of particular relevance for the elaboration of scenarios.

Special attention will be devoted to **two classes of territories**, which are those hosting the three stakeholder territories (Barcelona, Turin, Hérault), namely:

- "Mega" cities and their provinces, both classified by ESPON as "European engines" (as in the case of Barcelona) and "Strong" Megas (as in the case of Turin),
- Coastal and tourist areas.

The quantitative scenarios will reflect the importance of both the global context (the period in which the recovery from the crisis will take place and the strategies that will be put in place by blocks of countries), and the policies that will be applied in order to face the global economic trends.

For the quantitative exercise, we therefore propose to built quantitative scenarios with the MASST model on the basis of the way in which the global context will develop, i.e.

a) whether the global economy will recover from the crisis in the short vs. long run;
b) whether the three main blocks of countries (EU15, New12 and BRIC) will either put in place a more courageous, more risky, and probably more

expansionary strategy or a more protective strategy whereby some countries (New 12 and BRIC) reinforce present tendencies.

For what concerns point a), our scenarios will be built according to two different assumptions on the duration of the crisis in which countries and actors will develop their competitive strategies:

- a situation in which the crisis will find the solution in the short term (up to five years). The demand of consumption goods, like electronic instruments, textile and clothing goods, drops in the short run, and the negative effects propagate especially in the sectors that produce these goods. Consumption of durable goods like cars recovers in a long time, and therefore sectors affected by durable goods is less affected than in a long term crisis;
- a situation in which the crisis finds a solution in the long run, affecting the demand also of durable goods and all related sectors.

For what concerns point b), the scenarios will be based on the following bifurcation in the driving forces:

- a modernising vs. price-competitive strategy by BRIC countries;
- a reactive vs. defensive strategy by the EU 15 countries;
- a reconverting vs. cost-competitive strategy by the Eastern European countries.

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A4: Adaptation of indicators, maps and tools to local-regional scale. As in the previous ESPON attempt with 3.2. Project, the qualitative approach and the quantitative one were highly integrated among each other: the qualitative scenarios were forced towards the indication of some very general quantitative variables (like the growth rate of GDP of non-EU countries, exchange rates, international interest rates, Structural Funds expenditure, share of science and technology jobs, …) working as "exogenous", "lever" variables for the subsequent regionalised quantitative foresight developed through the MASST model; on its turn, the maps produced by the MASST model were elaborated through a qualitative and smoothing procedure. By the same token, in this project the qualitative scenarios will provide elements for the quantitative procedure, both at NUTS 2 level (through the MASST model) and at NUTS 3 level (the MAN-3 sub-model).

Maps concerning development and employment aspects of the different scenarios will be produced for the entire EU27 at NUTS-2 and for the three countries (Italy, Spain, and France) at NUTS-3.

The new tool, as said before, will be the **MAN-3 sub-model**, allowing a **quantitative "conditional" foresight** starting from the results supplied by the MASST model and **going down to the NUTS 3 level for the three countries. New indicators** collected for the Barcelona metropolitan area (and the area of the Diputaciò in particular) **will allow the "fine tuning" of the model foresights according to the concrete condition of the area**.

B – Concerning the application of methodologies and instruments to the case of Barcelona Provincial Council (BPC):

B1: application of integrated scenarios to the territory of BPC. The generation of quali-quantitative scenarios will proceed through three main phases:

- integrated quali-quantitative scenarios for the EU at NUTS 2 level (updating the previous ESPON 3.2 results),
- integrated quali-quantitative scenarios at NUTS 3 for three countries (Spain, France, Italy) using the MAN-3 sub-model and new qualitative reflections;
- **integrated scenarios for the Barcelona area**, on the basis of local information coming from Lead Stakeholder and PP2 (experts on the Barcelona and Catalunia areas).

The last step will be accomplished through the observation of structural indicators of the area, its recent economic performance with respect to Spain and the other European "Mega" regions, dispersed information concerning governance, public/private cooperation networks, trans-territorial cooperation networks.

B2: application of thematic scenarios to the territory of the BPC. In the definition of some new thematic scenarios (global financial crisis, emerging countries, energy prices, role of rural areas), the same logical chain exposed in the previous point will be followed: scenarios will apply in an increasingly targeted way to the entire EU territory, its regions, Mega and maritime tourist areas, and the Barcelona area.

By adapting the thematic scenarios to the local/regional scale and with particular respect to the Barcelona Provincial Council the Lead Partner will provide policy messages and recommendations. To improve these aspects the Lead Partner envisages including in each report (interim, draft and final) a specific section where the policy messages will be highlighted.

B3: development of tools to produce scenarios on single territories in a European context: synthesis and communication. The general methodology followed, for the quali-quantitative production of scenarios, will be made explicit with reference to the Barcelona case, in order to constitute a kind of standard for other foresight exercises. Maps and tools will be made available in the occasion of the two Workshops with policy makers and representatives of the local institutions, as well as in the dissemination phase.

B4: Policy messages and recommendations, stressing the economic, productive and land-use scenarios. The Lead Partner will take care to ensure the balance between econometrics and policy aspects. In particular, the Lead Partner will strengthen one of the most important phases of the project which concerns spatial development policies managed and designed by the local/regional level. The scenario analysis will be kept at the NUTS-3 level but policy suggestions could refer to 2/3 internal territories (the central city, the metro area and the rest).
Moreover, by updating and developing the qualitative scenarios at NUTS-3 level, the Lead Partner will also take into consideration the evolution of implemented policies at the province level.
The development of a "vision" considering the main global challenges but building on the specificities and the "vocations" of each territory will be emphasized.

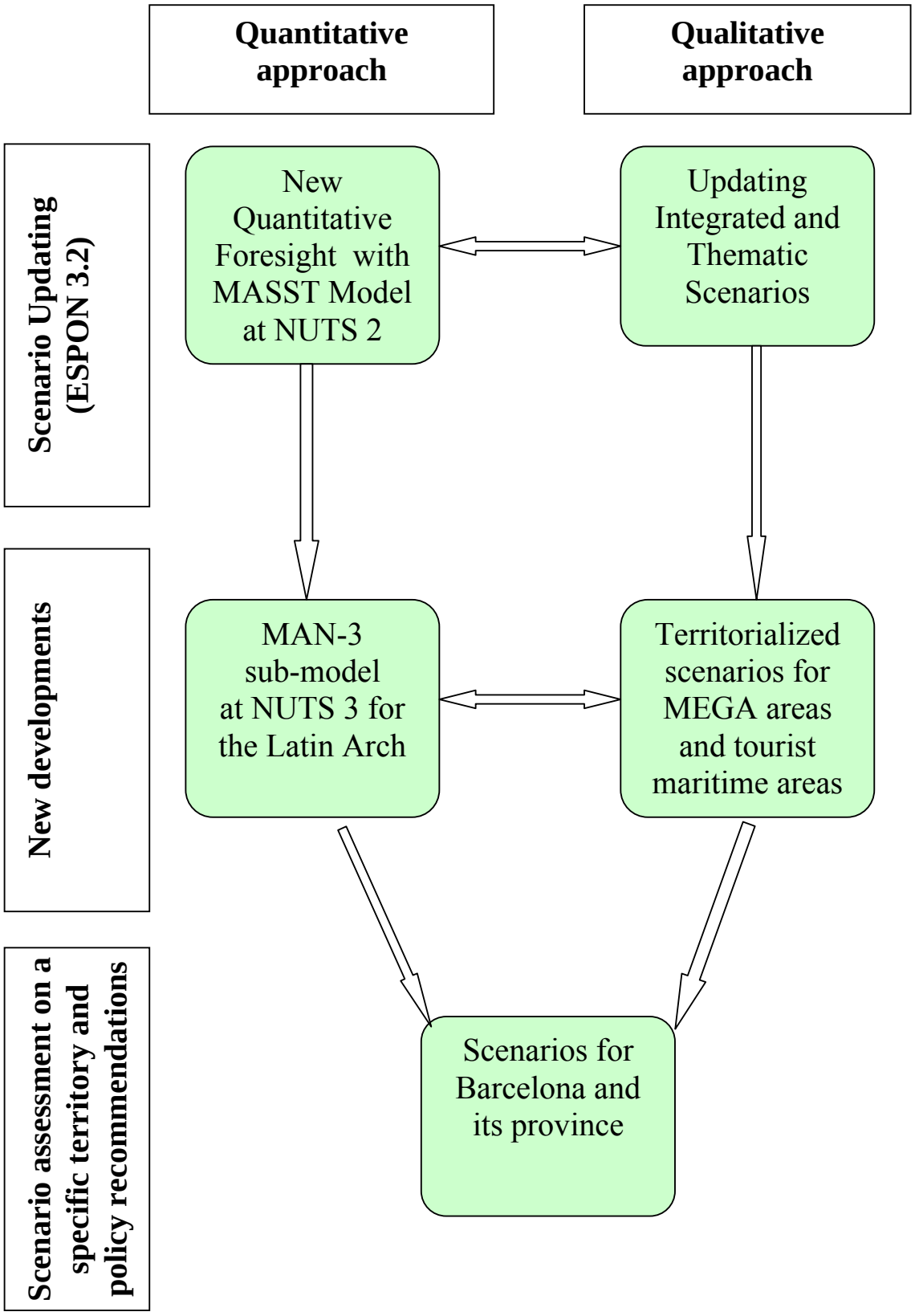
In synthesis: the project **will build upon the methodological and scientific achievements of the ESPON 3.2** project, concerning in particular the merging of qualitative and quantitative methodologies in order to build territorial foresights for the European regions, **introducing the following innovations**:

- **the updating of the thematic and integrated qualitative scenarios** (a task assigned to Subcontractor 1 of Lead Partner – S1LP, who participated actively in the preceding experience);
- **the construction of a new sub-model capable of producing quantitative "conditional" forecast at the NUTS 3 level** (on the basis of the results of simulations conducted at NUTS 2 level). This task is assigned to the LP;
- **the "fine tuning" of the foresight on the Barcelona area through direct inquiries and indicators collected and interpreted at the local level** (a task mainly assigned to PP2, with the assistance of the Lead Stakeholder);
- **the inclusion of policy recommendations for the Barcelona area** based on the challenges pointed out in the research project.

The general structure of the project, as was sketched above, is presented in Table 1.1.

Concerning the fact that a new model will be built and operated - explicitly constructed according to the necessity of the ESPON programme, its Managing Authority and Coordination Unit and under the request of some far looking local policy stakeholders - it is important to mention some **intellectual property rights elements** and agreements. The Lead Partner agrees to share the ownership, title, industrial and intellectual property rights of results of the operation, reports and other documents related to the subsidy contract with the MA; with regards to the **software Package of the model, called MAN-3**, its ownership, industrial and intellectual property rights are owned by the Lead Partner, however the results of the model (the "service" of the model) - as being the result of the subsidy contract - will be shared between the Lead Partner and the MA.

Tab. 1.1 – The general structure of the project: logical and methodological elements



2. METHODOLOGICAL ISSUES

The scientific approach and methodologies that will be followed are presented in the following sections.

The main theoretical element that drives the philosophy of the project and the modeling effort resides in the concept of "Territorial Capital". Territorial capital is the complex set of elements that explain the differential performance of the single territories with respect to wider reference areas: the performance of (Nuts 2) regions with respect to their country and the performance of (Nuts 3) provinces-subregions with respect to their region. The concept is presented in Sect. 2.1.

The following three Sections present respectively:

- the new version of the MASST model that will be utilized in the project, in order to accommodate the new thematic and integrated scenarios into the quantitative foresight model (Sect. 2.2),
- the structure of the MAN-3 sub-model that will be built in order to simulate into the future the differential behavior of Nuts 3 regions with respect to their respective Nuts 2 region, and the data and information requested,
- the methodology for qualitative scenario building.

2.1. Territorial Capital

The concept of *territorial capital* was first proposed in a regional policy context by the OECD in its *Territorial Outlook* (OECD, 2001), and it has been recently reiterated by DG Regio of the Commission of the European Union: "Each Region has a specific 'territorial capital' that is distinct from that of other areas and generates a higher return for specific kinds of investments than for others, since these are better suited to the area and use its assets and potential more effectively. Territorial development policies (policies with a territorial approach to development) should first and foremost help areas to develop their territorial capital" (European Commission, 2005, p. 1).

As is widely apparent from current research work, 'territory' is a better term than (abstract) 'space' when referring to the following elements:

- a system of localised externalities, both pecuniary (where their advantages are appropriated through market transactions) and technological (when advantages are exploited by simple proximity to the source);
- a system of localised production activities, traditions, skills and know-how;
- a system of localised proximity relationships which constitute a 'capital' – of a social psychological and political nature – in that they enhance the static and dynamic productivity of local factors,
- a system of cultural elements and values which attribute sense and meaning to local practices and structures and define local identities; they acquire an economic value whenever they can be transformed into marketable products – goods, services and assets – or they boost the internal capacity to exploit local potentials;
- a system of rules and practices defining a local governance model.

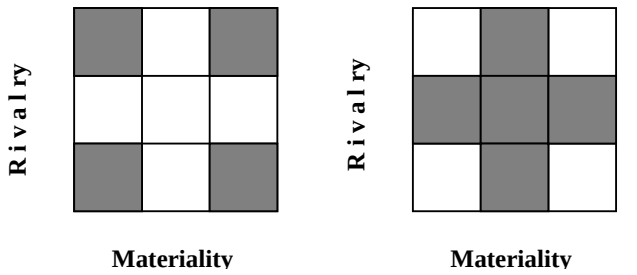
Accordingly, the OECD has rightly drawn up a long, sometimes plethoric but well-structured, list of factors acting as the determinants of territorial capital, and which range from traditional material assets to more recent immaterial ones. "These factors may include the area's geographical location, size, factor of production endowment, climate, traditions, natural resources, quality of life or the agglomeration economies provided by its cities, but may also include its business incubators and industrial districts or other business networks that reduce transaction costs. Other factors may be 'untraded interdependencies' such as understandings, customs and informal rules that enable economic actors to work together under conditions of uncertainty, or the solidarity, mutual assistance and co-opting of ideas that often develop in clusters of small and medium-sized enterprises working in the same sector (social capital). Lastly, according to Marshall, there is an intangible factor, 'something in the air', called the 'environment' and which is the outcome of a combination of institutions, rules, practices, producers, researchers and policy makers that make a certain creativity and innovation possible" (OECD, 2001, p. 15).

Though interesting and innovative, the preceding list is by no means exhaustive and internally consistent. A three-by-three matrix, both theoretically sound and relatively exhaustive, can be proposed to classify all potential sources of territorial capital. It is built upon two main dimensions:

- rivalry: public goods, private goods and an intermediate class of club goods and impure public goods, and
- materiality: tangible goods, intangible goods and an intermediate class of mixed, hard-soft goods.

The four extreme classes – high and low rivalry, tangible and intangible goods – represent by and large the classes of sources of territorial capital usually cited by regional policy schemes. They can be called the 'traditional square'. On the other hand, the four intermediate classes represent more interesting and innovative elements on which new attention should be focused; they can be called the 'innovative cross' (Tab. 2.1) (Cmagni, 2008)

Tab. 2.1 - Traditional and innovative factors of territorial capital



the "traditional square" the "innovative cross"

These latter components comprise, on the materiality axis, mixed goods characterized by an integration of hard and soft elements, material goods and services which indicate a capacity to translate virtual and intangible elements into effective action, cooperation, public/private partnership, supply of services: a capacity, that is, to convert potential relationality into effective relationality and linkages among economic agents. On the rivalry axis there is an intermediate class of goods encompassing two different relevant cases:

- impure public goods in which, as in pure public goods, excludability is low, but rivalry is higher because, for example, of increasing congestion and scarcity. In this case, rivalry may also take the form of interest conflicts among different types of users or between the class of generic (and respectful) users and some specific free-riders whose action may endanger the consistency of the public territorial goods;
- club goods, where the opposite condition holds, namely high excludability (with respect to non-members) and low rivalry.

A third intermediate class, likened here to the category of private goods, can be represented by 'toll goods': a typology of public goods whose use, because it is excludable, is subject to a toll levied by the public administration or by a concessionaire. The closer the price paid is to the production and maintenance cost, the less these public goods are distinguishable from ordinary private goods.

In all these intermediate cases, a crucial control function must be performed by public authorities in order to keep the potential benefit to the local community high and pervasive. Rules, regulations and authorities must be put in place, and they must maintain a well-balanced and wise position. But also new forms of local governance based on agreements, cooperation and private/public synergy can perform well, and even better than traditional 'government' interventions.
The various categories of territorial capital are set out in Table 2.2.

Table 2.2 - A theoretical taxonomy of the components of territorial capital

Rivalry	Tangible goods (hard)	Mixed goods (hard + soft)	Intangible goods (soft)
High rivalry (private goods)	Private fixed capital stock Pecuniary externalities (hard) Toll goods (excludab.) *c*	Relational private services operating on: - external linkages for firms - transfer of R&D results University spin-offs *i*	Human capital: - entrepreneurship - creativity - private know-how Pecuniary externalities (soft) *f*
(club goods) (impure public goods)	Proprietary networks Collective goods: - landscape - cultural heritage (private "ensembles") *b*	Co-operation networks: - strategic alliances in R&D and knowledge - p/p partnerships in services and schemes Governance on land and cultural resources *h*	Relational capital: - associationism - co-operation capability - collective action capability - collective competencies
(public goods) **Low rivalry**	Resources: - natural - cultural (punctual) Social overhead capital: - infrastructure *a*	Agencies for R&D transcoding Receptivity enhancing tools Connectivity Agglomeration and district economies *g*	Social capital (civicness): - institutions - behavioural models, values - trust, reputation *d*

Materiality

The economic role of territorial capital is to enhance the efficiency and productivity of local activities. The intermediate class of club-goods or impure public goods implies, or requires, strong relationality and seems of great relevance to the governance of local development processes. On the one hand stand proprietary networks – of a hard nature when they are physical, or a soft one when they concern cooperation agreements and the supply of common services - ; on the other, there are public goods subject to congestion or to opportunistic, free-rider or endangering behaviour. In both cases, new forms of governance, participatory and inclusive, should be developed in order to accomplish the maximum benefit for the members of the 'club' – the local community. The presence of social or relational capital in the form of trust and cooperative attitudes is highly beneficial in this respect.

All the above considerations have significant implications for new spatial development policies (OECD, 2001) which introduce governance styles addressed to

cooperation and relationality. A telling example of the style required is provided by the new strategies necessary to cope with the issue of the knowledge society: instead of (or besides) injecting public money directly into the system of firms, universities and research centres, which by and large are self-referential systems with their own specific goals, public policy should support 'relational' actions, such as common schemes and production projects built through cooperation among the above-mentioned actors operating on the local or regional scale; or it should support 'transcoding' services linking scientific output and business needs / ideas, such as transfer of R&D, development of a science-based entrepreneurship or university spin-offs.

More generally, the approach suggests a new role for local or regional policy-makers as the 'facilitators' of linkages and cooperation among actors, both at the regional and the inter-regional/inter-national scale.

The concept of territorial capital will enter the project in many ways. First of all, in the modelling and econometric exercises, where we will try to measure at least some of these elements, both in the MASST model (something that is already achieved) and in the new MAN-3 sub-model (WP 2.3 and 2.5). The relevance of the different elements of territorial capital in explaining the success of the single sub-regions will be a highly relevant task for the entire ESPON project.

Secondly, it will enter in the development of the Report on Barcelona (WP 2.4) and the Scenarios for the Barcelona area (WP 2.8-9): business networks, social networks, city networks are already at the centre of the interest of the Barcelona Diputaciò (Diputaciò Barcelona, 2002, 2006), and will be inspected by PP2; strong public engagement with respect to the efficiency and the quality of the territory are also widely present in the area and are at the basis of its recent economic success. Presence of human capital, creativity and entrepreneurship are also important development assets and elements on which spatial policies in the Barcelona area are and will be strongly addressed to.

2.2. A New Version of MASST

The quantitative part of ESPON 3.2 scenarios relies on the MASST model, i.e. a regional growth forecasting model, able to predict behavioral trends of economic growth under different assumptions on the driving forces of change. The structure and operationability of the model are presented in the ESPON web site.

This model is used in this project as a first step towards a more territorially disaggregated scenario building methodology. The importance of this methodological step for the construction of more territorially disaggregated scenarios in fact depends on the fact that it allows:

- to highlight the major general trends that emerge from the scenario assumptions at the regional level throughout Europe;
- to take these major trends into account, by explaining at a more territorially disaggregated level the behavioral patterns of economic growth with the most important features highlighted by the model.

The model used in this project will be a more updated version of the MASST model, enlarged to encompass the sectoral dimension. The simulations will obtain as an output of the model at NUTS 2 for all 27 EU countries:

- regional GDP growth rates;
- industrial employment growth rates;
- tertiary employment growth rates;
- population growth rates.

under certain assumptions of the driving forces of change in the economy. In particular, a baseline, a competitive and a cohesive scenario were built, for the entire EU at NUTS2 for the 27 Member Countries.

In this project, new simulations will be run with respect to the old ESPON 3.2, in order to integrate some new trends in the economy just recently emerged (financial crisis, drastic increase in oil prices, trends in emerging economies), that change for sure the main megatrends of the economy.

Some basic features of the MASST model will be retained, fundamental for the comprehension of regional growth nowadays:

1) The *interactive national-regional approach*. The combines top-down and bottom-up approaches so that an interdependent system of national and regional effects is built. This structure enables account to be taken of vertical and horizontal feedbacks between the regional and the national economy. In fact, thanks to its structure, the MASST model is able to register the effects of a shock at the national level (whether a change in macroeconomic trends or a policy choice) on both the national and regional growth rates; moreover, it is able to interpret the effects of a shock at regional level on both the national and regional performance;

2) the *integrated nature*. The structure of the model allocates specific places to both socio-economic and spatial (horizontal) feedbacks among regional economies. While the former are captured by the socio-economic conditions generating interregional migration flows, the latter are measured by spatial spillover effects, the growth rate of a region being also dependent on the growth rate of neighbouring regions;

3) the *non-material nature of regional assets* explaining economic growth. In MASST, regional growth is in fact also conceived as a *relational and a spatial process*: demographic (population growth and migration flows) and territorial tendencies perform an important role in explaining regional growth differentials. In the case of relational elements, data unavailability admittedly hampers full empirical analysis of this dimension, at present replaced by socio-demographic phenomena like migration; it is nevertheless important theoretically to stress its importance and to suggest future data collections in this area at regional level. The spatial and territorial dimensions help explain regional growth in two ways. Firstly, the model directly captures proximity effects through the measurement of spatial spillovers; moreover, with the introduction of variables interpreting the territorial (agglomerated, urbanized, rural) structure, the model indirectly measures the agglomeration economy (diseconomy) effects that influence growth (decline) in a cumulative way;

4) the *endogenous, local competitiveness-driven approach* in explanation of regional growth, as we expected it to be. Regional growth is explained by local factors (that can be called territorial capital: human capital, agglomeration economies, creativity, accessibility, …), and interregional competitiveness stems from specific locational advantages and resource endowment;

5) the *macroeconomic (multinational) approach*. Short-term (macroeconomic) effects are dealt with at the national level, and their feedbacks on national and regional economies are taken into consideration in explaining local dynamic patterns. MASST is a *dynamic model*. The outcome of one period of time at both national and regional level enters the definition of the output of the following period, in a cumulative and self-reinforcing development pattern. As mentioned above, MASST is a *generative* regional growth model in which regional performance influences national growth patterns. It is this feature that distinguishes the model from the ones present in the literature. Given the above characteristics, the model is a *multi-layer, policy impact assessment model*. The structure of the model, in fact, allows measurement of the impact of national (and supranational) policy instruments on both regional and national growth, and the impact of regional policies on national and regional growth.

2.3. The MAN-3 model

The methodology that we suggest in order to build scenarios at a more disaggregated territorial level than NUTS 2 foresees an important step in moving the quantitative results of the MASST model to the NUTS 3 level.

This step is developed thanks to the implementation of a simplified, extrapolative / comparative sub-model, called the MAN-3 (Masst At Nuts 3) model. The sub-model is built in a way that the main trends and driving forces present in each scenario are considered and included in the forecasting process, as well as the importance of the territorial specificities of the single regions of the three countries considered. The aspect of the MASST model that will not be replicated at NUTS 3 is the comprehensive interregional interaction logic of the whole model (with the international interregional spill-over effects) and the internal consistency of the macroeconomic forecasts.

The existence of these two models (MASST at NUTS 2 and MAN-3) has some advantages in the creation of the scenarios:

- MASST allows a more general and consistent scenario framework at NUTS 2, with a strong inter-linkage among all regions of Europe;
- MAN-3 allows the “fine-tuning” of the conditional foresights to the structural characteristics of the model.

MAN-3 sub-model is an econometric model which explains the differential GDP growth rate at NUTS3 compared to the GDP growth rate at NUTS 2. In other words, the sub-model aims at identifying the reasons that explain why a sub-regional area is able to grow more or less that its region.

Like MASST, also its sub-model interprets local growth as:

- a *competitive process*, based on supply rather than demand elements, like quality (and quantity) of local resources, product and process innovation, technological advances, local knowledge;
- a *socio-relational process*, since it is based not only on material production factors, but also on non-material resources endogenously developed thanks to multiple relations happening inside the local context. Relational capital gives rise to local cumulative processes of knowledge creation, to processes of collective and interactive learning, reinforcing decision-making processes of local actors. These elements have an active and vital role in defining local economic competitiveness and growth. Traditional local growth models based merely on resource endowment have a limited interpretative power in this respect;
- a *territorial and spatial process*, interpreting territory as an autonomous production factor, rather than the mere geographical place where development occurs; territory generates increasing returns, cumulative self-reinforcing mechanisms of growth in the form of dynamic agglomeration economies. Local economic growth is also the result of interregional interaction processes, rather than the result of inter-regional resource allocation decisions or of an increase in resources endowment. A-spatial local growth models are for this reason inappropriate;
- an *interactive process* of the local economy within the wider national and international economic system. Pure bottom-up models by and large overlook national-regional linkages, and be avoided;
- an *endogenous process*, whose explosive or implosive trajectory are determined by the way the entire local production system reacts to external stimuli and is able to take advantage of short and long-term trends in the national and global economy.

Given this interpretation of local growth, the reasons that explain the relative performance of a sub-regional territory have to be found in its *territorial capital,* that covers all genetic aspects of local growth. The elements that, up to now, are possible to measure with some precision at Nuts 3 level and to include in the sub-model are:

- *local material inputs and resources*, like infrastructure endowment, share of self-employees, external resources like CAP (Community Agricultural Policy) funds, share of tertiary activity;
- *structural and sectoral resources and human capital*: quantity and quality of human capital, availability of energy resources;
- *the institutional elements*, like economic integration processes which provide a larger market potential for regions;
- *the spatial and territorial structure*, the former captured through the relative geographical position, which emphasises growth opportunities of a region dependent on its neighbouring regions' dynamics (spatial spillovers of growth). The latter captured through the *settlement structure* of region, a good proxy to capture the role of agglomeration and urbanisation economies on regional performance, enabling parameters of the different explicative variables to vary across different settlement structures present in space, again emphasising the strategic elements, like agglomeration economies.

The model will be estimated on the MED-ARCH (Arco Latino), i.e. on all NUTS 3 of the three countries of Arco Latino (Italy, France and Spain).

Examples of the indicators on which the sub-model will be estimated are contained in the following table:

Category	Indicator	Italy	Spain	France	Sources
Local material inputs and resources	Indicators on transport infrastructure endowment	■	■	■	Tagliacarne, ESPON 1.2.1
	Indicators on infrastructure for leisure time	■			Tagliacarne
	Structural funds by typology	■	■	■	ESPON 2.2.1
	Share of tertiary activity	■	■	■	Cambridge Econometrics
	Structure of agricultural holdings by NUTS	■	■	■	EUROSTAT
Structural and sectoral resources and human capital	Labor force by major industries (3 classes)	■	■	■	Cambridge Econometrics
	Years of schooling (average of regional samples)		■	■	ISSP
	Energy consumption	■	■	■	Light intensity from satellite, own calculation (ArcGIS needed)
	Human capital completed (average of regional samples)		■	■	ISSP
Institutional elements	Quality of life classifications	■			Camcom
	Imports and exports by macro-area of origin & destination	■			ISTAT
	Various questions on the role of government		■	■	ISSP
Spatial and territorial structure	Spatial typologies	■	■	■	ESPON 3.1, 2.1.1, 1.1.2
	Relative position/growth spillovers: GDP is available at NUTS3 level. Spillovers to be calculated	■	■	■	ESPON
	Land use	■	■	■	ESPON 1.1.2, 3.1; Corine Land cover
	Risk of investments (e.g. average interest rate on corporate loans)	■			Bank of Italy; other Countries to be verified.

Availability of similar information for the three countries will be checked in the early phase of the project. In case, distinct simulations will be run for each individual country. The goal will be to make the best use of existing information on the different structural elements that characterize sub-regional territories (their "territorial capital"), both those already taken into consideration in the Masst model and other ones.

The quantitative analysis and interpretation of the differential behaviour of Nuts 3 regions with respect to their respective Nuts 2 regions in each country, realized through the estimation of the MAN-3 sub-model, will represent a relevant by-product of this phase of the project for the entire ESPON project.

2.4. The qualitative scenario building

As already mentioned, the preparation of the scenarios will undergo a threefold procedure:

a. **the updating and redefinition of some driving forces** according to new important trends emerged in the last years, namely:

- economic and financial crisis, started in the U.S. and involving Europe and emerging countries,

- new role of some major emerging countries (BRICs),

- contrasting and highly fluctuating oil and energy prices,

- new roles for the rural areas.

These elements will be included in some thematic scenarios;

b. the inclusion of these updated thematic scenarios in three integrated scenarios, tentatively baseline, competitive and cohesive scenarios;

c. the focalisation on the effects of these scenarios on the Barcelona area, to be checked and merged with the results of the simulation procedure with the MAN-3 sub-model.

These tasks will be performed by S1LP, in strict cooperation with LP and PP2. The LP, PP2 and Lead Stakeholder will act as referees with respect to first approximation reflections produced by S1LP.

Concerning the new context element of the present economic and financial crisis the following aspects will be inspected and quantitatively included in the forecasting model:

In the global economic and financial scenario:

Recession and afterwards lower growth rates than before the crisis;
Deglobalisation of certain sectors due to the crisis;
Evolution of domestic demand in the EU: will depend upon the macro-economic policies applied;
Possible increase of inflation or deflation: will depend upon the macro-economic policies applied;
Revival of endogenous growth: will depend upon the macro-economic policies applied;
FDIs: Strong reduction in the short and medium term;
Access to credits for investments: more controlled and restricted;
Development of the “project economy”.

By the same token**, in the emerging economies scenario** the following aspects will be analyzed**:**

Intensification of economic cooperation at international level for overcoming the financial crisis and defining a more secure global economic basis (possible reconsideration of macro-economic policies; new regulation mechanisms in the financial sector);
Slowing down of negotiations related to further EU enlargements;
Temptation of protectionist measures;
Slowing down of various external cooperations (Union pour la Méditerranée etc.);
Intensification of economic problems outside EU borders (Ukraine, Bielorussia, Caucasian republics);
Possibly facilitation of cooperation between EU and United States.

In the energy and oil price scenario will be inspected the following elements**:**

Lower increase of energy demand during the crisis;
Strong revival of nuclear energy in Europe;
Lower investments in the oil sector due to low oil price;
OPEC has (provisionally) lost the control over oil price;
Probable emergence of a world cartel of gas producing countries;
Booming of solar energy;
Decreasing share of fossil energy in the transport sector.

Finally, **in the scenario on the new emerging role of the rural areas** the following aspects will be analyzed**:**

Possible economic revival of rural areas;
Development of "green economy".

3. PROJECT ORGANIZATION, EXPECTED DELIVERIES AND DISSEMINATION PLAN

3.1. The general organization

The logical, organisational and temporal structure of the research work is presented in Tables 3.1 and 3.2.

The partners are assigned the following general tasks:

LP: coordination, quantitative updated scenarios at NUTS 2; methodology for NUTS 3 quantitative scenarios; application of the methodology to the MED-ARCH countries;
PP2 (project partner 2): Barcelona report and Barcelona scenarios;
S1LP (subcontractor 1 to lead partner): updated qualitative scenarios, both thematic and integrated, of the ESPON 3.2, and territorial qualitative scenarios for typologies of regions.

Three main work packages are proposed, as suggested in the Terms of References, namely (see Table 3.1):

3.1.1. WP1: coordination (task of the lead partner)

The methodology for the perspective analysis at NUTS 3 is based on a tight linkage between qualitative and quantitative approaches at different territorial level. The success of the methodology depends therefore on a very efficient coordination among partners. Interactions between partners regard:

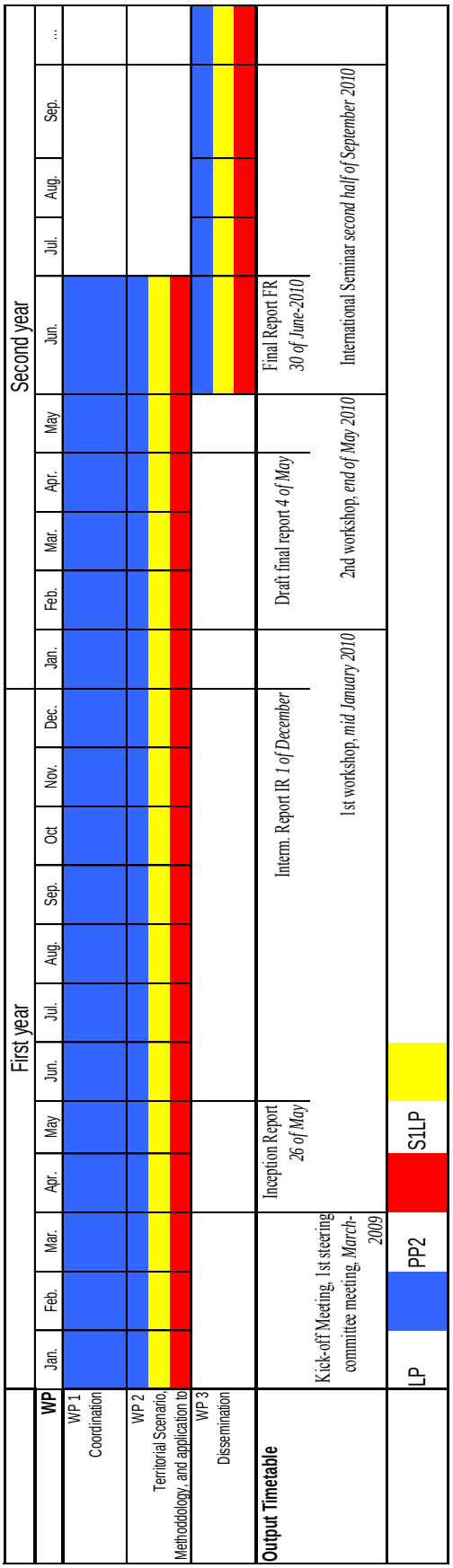
- comprehension of the quali-quantitative approach, and the identification of common driving forces for the scenario building;
- inputs from qualitative analysis at more aggregated level into the MASST 2 model for its updated simulations;
- inputs from NUTS2 quantitative results to NUTS3 MAN 3 model;
- coordination between results of MAN 3 model and qualitative scenarios for typologies of regions;
- coordination between NUTS 3 results and the results for the Barcelona province;
- coordination between the different research units and the stakeholders.

All these interactions have to take place in due time, in order not to jeopardize the subsequent phases of the work.

Coordination also regards the organization of the meetings with the stakeholders and the circulation of financial reports.

Coordination will last the entire time span of the research.

Tab. 3. 1 ***Breakdown of the research work by work package and partner responsibility***



3.1.2. WP2: activities (task of all partners and stakeholders – see afterwards for details).

This task will last one and half year, from January 2009 to May 2010 (Draft final report). One more month will allow the preparation of the final report. All partners are involved, as well as the three stakeholders.

Activities will last 18 months.

3.1.3. WP3: dissemination (from June – December 2010)

The dissemination phase will host the following activities:

- presentation and discussion of methodology and results in scientific meetings;
- presentation of results at DG REGIO;
- presentation of results in an international seminar organized in September 2010;
- presentation of results in Barcelona, organized with the Province of Barcelona and the MC of ESPON;
- 3 tailor-made workshops, one in each territory for policy makers and for personnel involved in territorial development.

All workshops and international seminars will be organized for the scientific part by the research team, which will provide the technical and scientific presentations and pay for travel and subsistence costs incurred by the team members. The involvement of local stakeholders and other interested bodies will be taken care of by the leading stakeholder and the other two stakeholder authorities (which will also hold the local organizational costs).

Partners involved: All.

Dissemination will start with the second meeting at the end of May 2010 and will continue after the completion of the project in June 2010 for some months (to be agreed with the MC, within the limits of the financial resources available for the dissemination activities).

3.2. The scientific activities

Breakdown of WP2 – Activities (see Table 3.2)

3.2.1. WP2.1. Thematic scenarios (partner involved: S1LP; time span: January – September 2009)

The first step of the methodology is **to update the qualitative thematic scenarios** that were developed in ESPON 3.2., taking into consideration the new driving forces that imposed themselves on the international arena over the last period, namely:

- financial crisis;
- oil crisis, and consequent oil price increase;
- emergence of new economies (BRICs);
- new role of rural areas.

Therefore, some thematic scenarios will be updated regarding:

- energy;
- economy;
- rural development.

The other thematic scenarios developed in ESPON 3.2 will only be slightly revisited, namely:

- demography;
- transport;
- climate change;
- governance;
- enlargement
- socio-cultural evolution and integration.

This work-package will last the first 9 months. Final results of this work-package will be provided in the interim report.

3.2.2. WP2.2. Integrated scenarios (partner involved: S1LP; time span: January – September 2009)

On the basis of the updated thematic scenarios, also the **integrated scenarios of ESPON 3.2. will be updated**, taking always into considerations the four main new driving forces quoted for the thematic scenarios.

In particular, the integrated scenarios that will be updated are:

- the baseline scenario;
- the competitive scenarios;
- the cohesive scenarios.

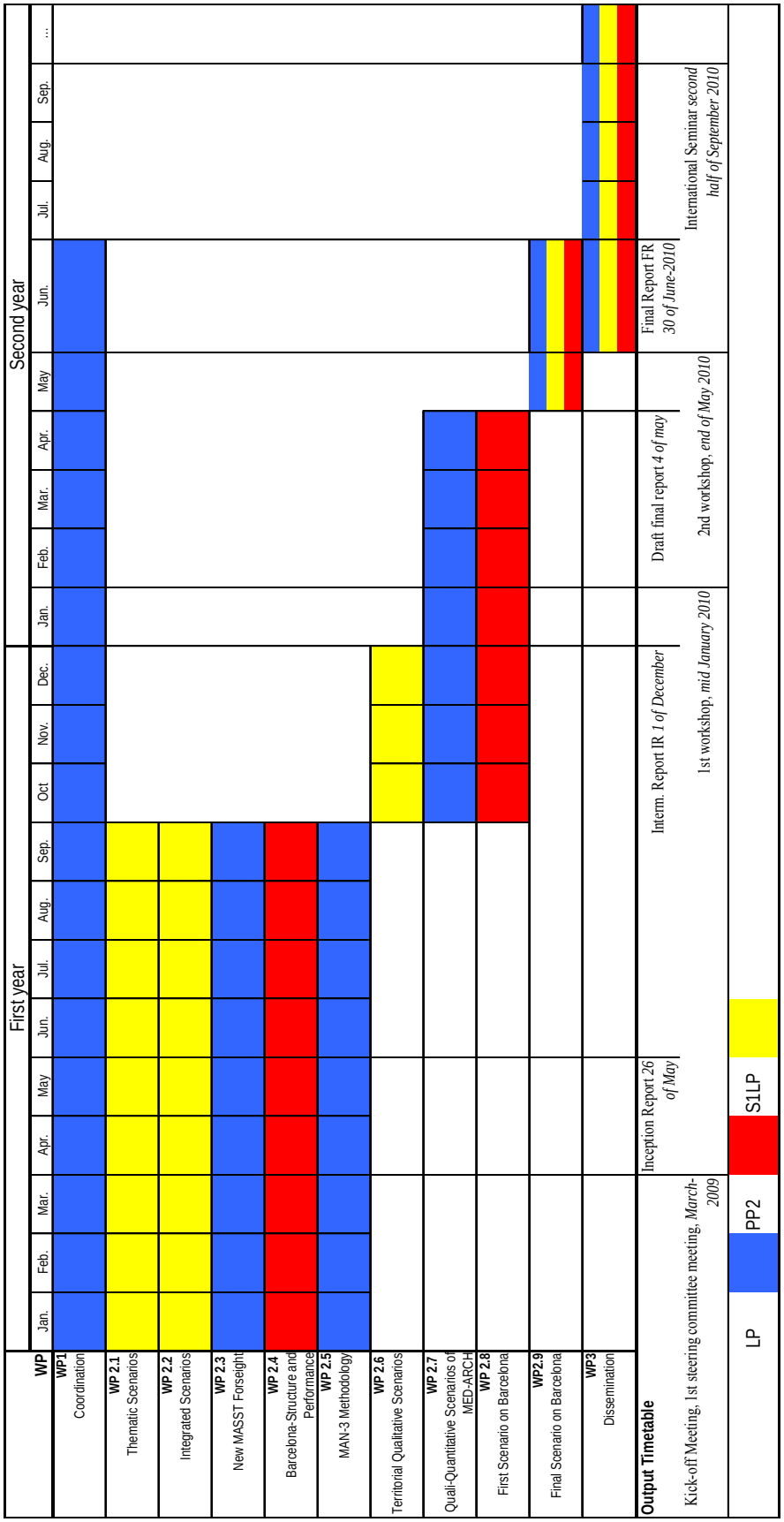
This work-package will last the first 9 months. Final results of this work-package will be provided in the interim report.

3.2.3. WP 2.3. New MASST foresights (partner involved: LP; time span: January – September 2009)

The aim of this work-package is to produce future behavioural trends of GDP, industrial and tertiary employment growth rates at NUTS 2, under the assumptions of the way the main socio-economic and institutional driving forces of change will develop in the future.

The results will be at NUTS 2 for all member states of the EU (27 countries); this general approach at a more aggregated level than NUTS 3 is useful since it allows for comprehensive interregional interaction among regional economies and internal consistency of macroeconomic forecasts.

Tab. 3. 2 ***Breakdown of the research work by sub - package and partner responsibility***



The methodology to achieve this aim is based on an **updated version of the MASST (Macroeconomic, Sectoral, Social, Territorial) model**, an econometric regional forecasting model developed in ESPON 3.2 project.

The model is extended with respect to ESPON 3.2. in order to take into account the sectoral dimension, left aside by MASST 1, and therefore to obtain industrial and tertiary employment growth rates as outputs of the model.

The scenarios that will be run will be the baseline, the cohesive and the competitive scenarios of ESPON 3.2, but updated in terms of assumptions on the above mentioned new driving forces.

This will be developed taking into consideration the updated analysis of the qualitative integrated scenarios.

This work-package will last the first 9 months. Final results of this work-package will be provided in the interim report.

3.2.4. WP 2.4. Barcelona structure and performance (partner involved: PP2¸; time span: January – September 2009)

In this work-package a first in depth analysis of the **structure and performance of the Province of Barcelona** will be provided, in order to build the general socio-economic framework of the recent past in which to insert the future scenario assumptions.

This work package will have as an output a report on the Barcelona economy, highlighting for both its economic structure and performance weaknesses and strength on which the assumptions of the scenarios can be linked to highlight future alternative growth patterns.

This analysis will be carried out by PP2 in strict cooperation with the local stakeholder, i.e. the Province of Barcelona, in order to prepare the ground for the scenarios.

This work-package will last the first 9 months. Final results of this work-package will be provided in the interim report.

3.2.5. WP 2.5. MAN-3 methodology (partner involved: LP; time span: January – September 2009)

This work-package contains the methodology for **"translating" the new MASST NUTS 2 results at NUTS 3**. This methodology lies on **the creation of a sub-model**

(called MAN-3 – Masst At Nuts 3), **which will be applied to the Arco Latino countries**.

The sub-model has the aim to explain the relative NUTS 3 GDP growth rates with respect to the region. In other words, the sub-model aims at identifying the main structural and endogenous determinants of the capacity of a NUTS 3 area to grow more or less than its region.

This will be done for all NUTS 3 of the three countries of the Arco Latino (France, Italy, Spain), through quantitative regression analyses.

A strong link exists between this work-package and WP 2.3. The main trends envisaged by MASST will be transferred at the NUTS 3, and taken into consideration in selecting the main explicative variables in the sub-model.

This work-package will last the first 9 months. Final results of this work-package will be provided in the interim report.

3.2.6. WP 2.6. Territorial qualitative scenarios (partner involved: S1LP; time span: October – December 2009)

This work-package contains the **qualitative scenarios developed at a more territorially disaggregated level**.

These scenarios will be built considering the results of WP2.2, since the exercise here will be to develop a more in depth perspective analysis of the integrated scenarios according to some typologies of regions, namely;

- coastal-tourist regions;
- rural regions;
- agglomerated and "mega" regions.

This is an important step of the methodology, since its output is an important value added for both the application of the MAN 3 sub-model and the final scenarios for Barcelona.

This work-package will last 3 months starting after the interim report (after the 9th month). Final results of this work-package will be provided in the final report.

3.2.7. WP 2.7. Quali-quantitative scenarios of MED ARCH (partner involved: LP time span: October 2009 – April 2010)

In this work-package the **MAN-3 sub-model will be applied to the MED-ARCH (Arco Latino)** countries, namely France, Italy and Spain.

The quantitative analysis will be built with the inputs from MASST and from the qualitative scenarios of WP 2.6. In this way, both the general trends throughout Europe will be taken into consideration thanks to MASST, as well as the specificities

of single typologies of regions that thanks to the qualitative integrated scenarios for some typologies of regions (WP 2.6) will not be underestimated.

This work-package will last 7 months starting after the interim report (after the 9th month). Final results of this work-package will be provided in the final report.

3.2.8. WP 2.8. First scenarios for Barcelona (partner involved: PP2; time span: October 2008 – April 2010)

The output of the MAN 3 and the qualitative integrated scenarios for specific typologies of regions will be useful to draft a first scenario for the Barcelona area. This step allows the **"fine tuning" of the model foresights according to the concrete condition of the area**.

This part will be done in strict cooperation also with **the lead stakeholder (the Province of Barcelona)**, who will strongly interact on both the inputs and the outputs of the scenario building methodology.

This work-package will last 3 months starting after the interim report (after the 9th month). Final results of this work-package will be provided in the final report.

3.2.9. WP 2.9. Final scenarios for Barcelona (partner involved: All; time span: May - June 2010)

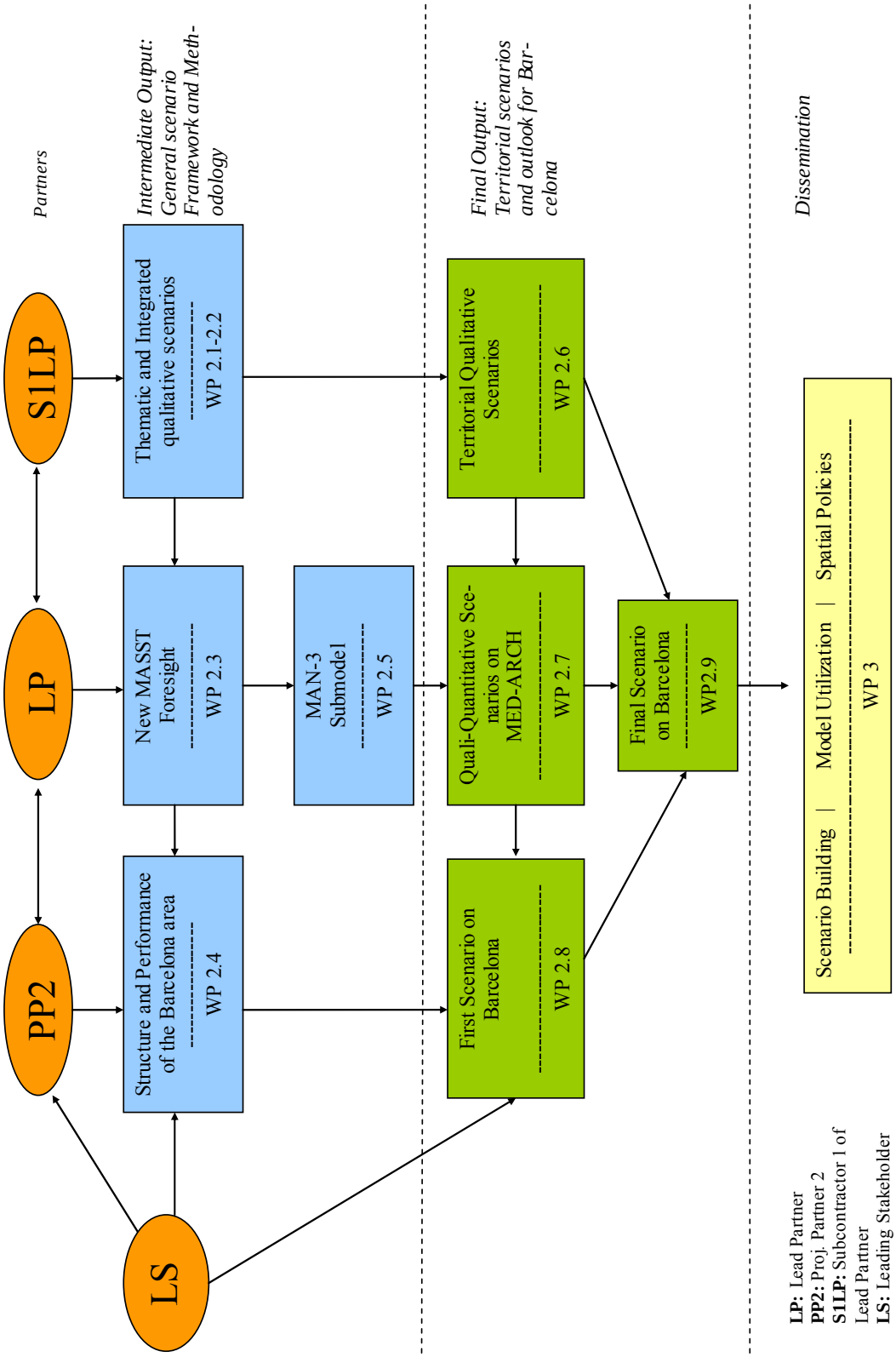
Once the results of the MAN 3 and the qualitative territorial scenarios will be definitive, the final scenarios for Barcelona will be built.

A **strong coordination with the Province of Barcelona** will be also in this case useful for directing the analysis and its final results.

This work-package will last 2 months starting after the 16th month. Final results of this work-package will be provided in the final report.

The general process and the interactions between functions (work-packages) and partners is depicted in Table 3.3.

Tab. 3.3 – Structure of project output and Work Packages



3.3. The dissemination of the results

The dissemination phase will host the following activities:

- presentation and discussion of methodology and results in scientific meetings (European Regional Science Association ERSA; International RSA; Regional Studies meetings; AESOP conferences);
- presentation of results at DG REGIO and the ESPON MC;
- presentation of results in an international seminar organized in September 2010 in Barcelona;
- presentation of results in Barcelona, organized with the Province of Barcelona;
- 3 tailor-made workshops, one in each territory for policy makers and for personnel involved in territorial development.

These last workshops will take place in the last six months of the project, and have a bi-directional nature: not only a mono-directional flow in the direction of policy makers but a deep interaction in order to test results of the quali-quantitative scenarios and he adaptation of these scenarios to the case of the three stakeholder areas.

All workshops and international seminars will be organized for the scientific part by the research team, which will provide the technical and scientific presentations and pay for travel and subsistence costs incurred by the team members. The involvement of local stakeholders and other interested bodies will be taken care of by the leading stakeholder and the other two stakeholder authorities (which will also hold the local organizational costs) (see fig....)

Dissemination will start with the second meeting at the end of May 2010 and will continue after the completion of the project in June 2010 for some months (to be agreed with the MC, within the limits of the financial resources available for the dissemination activities).

Other dissemination activities, out of the budget of the project, could be organized on request of specific regions/stakeholders/policy makers, and agreed with the ESPON CU.

An important dissemination activity will regard the ESPON community: results will be presented at the ESPON meetings, including methodologies and final maps, in order to understand possibilities for extending the methodology to other EU countries.

To usual data problem will be encountered: not just existence of information and data, but changes in the definition of Nuts 3 regions over time. The team will not work on updating or re-organization of the data base, but will refer to the ESPON équipe in charge of it (led by Claude Grassland).

Tab. 3. 3 ***Timetable with stakeholders***

	First year												Second year												Participants
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct	Nov.	Dec.	
Kick off																									TPG/Steering Committee
Inception report																									TPG/Steering Committee
Interim report																									TPG/Steering Committee
Final report																									TPG/Steering Committee
Local workshop																									Policy makers/Stakehold./ TPG/Steering Commit.
International seminar																									Policy makers/Stakehold./ TPG/Steering Commit.
Local diffusion seminars	Reaserch																				Diffusion				Barcelona/Torino/L'Hérault
Local press conferences																									Barcelona/Torino/L'Hérault

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ANNEX TO THE INCEPTION REPORT

PROJECT 2013/2/6
SS-LR
SPATIAL PERSPECTIVES AT NUTS 3 LEVEL

1. As requested in the CU Response to the Inception Report of our project, we herewith confirm acceptance of the following points underlined by the CU itself , the MC, the MA, the European Commission and the project Stakeholders.

2. During the last Prague meeting, we had the opportunity to discuss many of the issues raised with the CU and the Lead Stakeholder, and to come to some agreement. On the one hand the Stakeholder emphasized the necessity to make an in-depth zoom inside the Barcelona Provincial Council area driving the qualitative scenarios to specific areas and helping the spatial development policy and planning of the Diputaciò; on the other hand the research partners emphasized the change in scale that was demanded, because the elements that build a European territorial scenario are not the same as those that drive development along certain axes inside a large metropolitan area. But a converging perspective was finally achieved, and is widely reflected in the suggestions of the “Response”.

3. Concerning a better balance between the econometric and the policy part. It is our interest to push our analysis well into the policy aspects, linked to the change in the overall perspective that is imposed by the present crisis. We probably gave a misleading impression of our goals emphasizing – in terms of space devoted – the econometric technicalities with respect to the policy ideas: this was due only to the fact that the econometric part constitutes the hardest one in terms of personal engagement and time, and on that part much work has already been done – and was partially included in the Inception Report. We reassure the CU that, as it is stated in the Inception Report, policy issues, both at the EU and regional/local level, will be dealt with substantially. Territorial cohesion goals – up to now insufficiently taken into consideration in present policies – and all the new issues that derive from the full assumption of a territorial capital approach are at the centre of the Project’s attention.

4. Concerning the methodology of the qualitative, scenario approach inside the Project, it follows the lines of the 3.2 project. Already in that project the main perspective was deeply territorial (by city size, coastal vs. mountain vs. differently dense areas, peri-urban rural areas vs. peripheral rural areas, etc.); only its quantitative translation was linked to the too wide statistical, NUTS 2, definition. Now we have the opportunity to deal with more homogeneous territories, namely NUTS 3 regions.

When going down to a Sub-Nuts 3 scale, new elements will be taken into consideration, namely horographic, environmental, settlement and transportation elements, that will be provided by the Lead Stakeholder.

5. Concerning the analysis and visualization of outputs of the scenarios for the Barcelona area: we agree that a sub-provincial disaggregation of the whole study area could refer to: “central city, coastal cities, inner metropolitan ring, outer metropolitan ring and the remaining mid-mountain area”. The precise definition of these sub-areas has to be provided by the Lead Stakeholder; on this definition, our Spanish partner will run some statistical elaborations on the recent trends, working at NUTS 5 (cluster analysis, shift-share analysis, other descriptive statistical analyses) in order to reinforce the general information of the team. Visualizations of the scenarios and main trends will be provided in terms of “some schematic and intuitive drawings representing the identified typologies of local semi-homogeneous territories and how they can be affected by driving forces, including EU and national policies”.

6. Concerning the indicators that will be used. For the general study on the three countries at NUTS3 level, the output indicators are the ones provided by the MASST model (GDP, employment, population, some sectoral trends); input indicators are also those employed in the MASST model, where available at NUTS3 level, plus an extra- effort to collect information on a wide array of territorial capital elements. Statistics in the three countries covered allow going beyond what was done with the MUSST model, in spite of the more detailed spatial disaggregation.

7. Concerning the adaptation of the general scenarios to the Barcelona area, our Spanish partners are already engaged in collecting data on the international performance of the area, in terms of international trade, Foreign Direct Investments, both off-shore and on-shore, patents, and on other excellence points of the economic fabric of the area.

8. Concerning timing, we are deeply engaged in keeping with the agreed deadlines, in spite of the huge work implied.

9. Concerning participation in formal meetings of ESPON and in agreed workshops with local policy makers, our engagement is out of discussion. We will also participate in the additional meeting in Montpellier in October, organised and supported by the Stakeholders. As far as dissemination is concerned, not much funds are left for this purpose, given the width of the research tasks. Synergies with other formal ESPON meetings will be explored.

10. Concerning a supposed excess of attention to “rurality”, we confirm our knowledge of the urban characteristics of the Arco Latino and the specific attention of the project to urban and metropolitan development issues. Rurality was only mentioned in one of the explored qualitative scenarios, to be intended as the necessary interpretation of new and emerging forms of urban-rural relationships (in terms of locational preferences of populations, real estate investments linked to tourism and

retirement areas of an ageing European population, some return to agriculture and agri-tourism, etc.). The European Mediterranean coasts are very much dependent on these processes.

11. We expect from the Lead Stakeholder important information concerning the internal structure of the area and main spatial policy strategies, as mentioned in sect. 4: main transportation axes, main commuting flows between the five sub-areas (sect. 5), environmental quality and main ecological networks, strength of the internal agricultural areas in resisting urbanization expansion, policy targets – past and present – concerning mobility of goods and persons, settlement structure and urban sprawl, cooperation with the head-city and the main municipalities, actual planning and policy powers of the Diputaciò. All this can take the form of maps (delivered and commented) and synthesis of policy documents.

The general quali-quantitative scenarios developed by the TPG will represent a crucial input for the Stakeholder (as agreed in a recent meeting with the Turin stakeholders), especially in terms of interpretation of the territorial effects of the crisis and the territorial shape and timing of the possible exit from the crisis. The cooperation with the Stakeholder will enrich this vision and add a territorial and planning dimension. The synthesis of the two approaches, supported by the deep knowledge of the Barcelona area of the Spanish partners, will find a melting moment in a closed workshop of one-two full days of the project partners and stakeholders (Espon CU invited) in spring 2010, hosted by the Diputaciò.

In conclusion. We accept with pleasure the suggestion to “be ambitious” enough in this project. We are and we were ready to accept a huge but interesting and relevant engagement: updating the qualitative scenarios developed b.c. (before the crisis) by project 3.2; running the MASST model with the new scenario references; building a brand-new foresight sub-model for NUTS 3 regions; estimating it with new territorial capital data at NUTS 3 level for three countries and simulating future trends for the Arco Latino; interpreting the Barcelona realm and devising new spatial trends and policies; participating in the definition of new styles in EU regional policies. We hope that our engagement could be useful for the ESPON enterprise and appreciated.

The scientific responsible of the SPAN-3 project
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17 july, 2009