TENDER
NO 2002.ESPON.1.2.1
ON A RESEARCH PROJECT ON

TRANSPORT SERVICES AND NETWORKS:

TERRITORIAL TRENDS AND

BASIC SUPPLY OF INFRASTRUCTURE

FOR TERRITORIAL COHESION

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The ESDP also highlighted in this respect the special role, which could be undertaken by Euro-corridors, global integration zones, gateway cities and urban poles, well distributed on the European territory, as nodes in the infrastructure networks.

The functioning of networks very much depends on access points : most prominent in that respect are ports and airports, which need to be efficiently linked to land transport modes in line with an organisational network approach.

Furthermore, communication and exchange between networks takes place in multi model nodes. Multi-modal points are becoming increasingly important for sustainable transport in order to be able to use the least environmentally unsustainable transport mode possible.

The major ESDP concept of *"parity of access to infrastructure and knowledge"*, understood as a guideline promoting a better territorial equity or balance… (e.g. for low density areas, ultra peripheral regions, coastal zones, inlands, mountain areas, transnational co-operation areas) are important issues in that respect. It should make the location parameters of the future more clear, including the relative importance of accessibility to infrastructure networks.

The diverse territory of Europe as well as the present spatial structure (with consideration of the polycentric development) indicates the problem of minimum supply of (public and private) infrastructure capable of providing the basic services required in all regions and to maintain the "service of general interest"... However, a basic supply of services represents only the first and minimum step towards the provision of higher degrees of infrastructure.

The interactions between different infrastructure networks… and territorial cohesion should be taken into particular account with regard to the growing importance of some EU Member States as transit countries in an enlarged European Union… In general, this project shall provide input for the territorial impact analysis of TENs policy under ESPON action 2.2.1..

4.3.2-General objectives

So, the general objectives are :

a) To contribute to balanced and sustainable spatial development and territorial cohesion.

b) To contribute to the identification spatial structures of the EU territory, in particular the degree and diversity of physical and functional polycentrism at different geographical scales… .

c) To define concepts and to find appropriate territorial indicators, typologies and instruments as well as new methodologies to consider territorial information linked to polycentrism, to detect territories (preferably below NUTS 2) most negatively and positively affected by the identified trends with special reference to regions in terms of accessibility, polycentric development, environment, urban areas, territorial impact assessment; particular attention will be paid to areas exposed to extreme geographical positions and natural handicaps in a global or world-wide context.

d) To develop possible orientations for policy responses…

4.3.3- Primary research issues envisaged

The research questions cover issues related to the basic supply of transport infrastructure and services within the EU territory as well as territorial trends of transport infrastructure network and services.

Transport infrastructure comprises the transport modes of road, rail, air, waterways… The concepts on effects of networks and the question of inter-modality should be addressed in close co-operation.

All the partners involved in the programme have to consider the following points :

-Identification, gathering of existing and proposition of territorial indicators and data and map-making methods to measure and display the basic supply of transport infrastructures and services as well as the trends and impacts of the development of transport infrastructure network and services. Compilation of national studies with European focus should be undertaken;

-The most important features of the present infrastructure networks with regard to territorial issues, i.e. the location and capacity of primary and secondary networks, the spatial patterns of access points, the flows between the access points identified (usually in an hierarchical order) and the number of users (types of users), which have access in real terms (different quality) to the networks;

-Specific typologies and territorial patterns in the transport infrastructure networks and services, referring to in particular the typologies used in the ongoing ESPON project 1.1.1 on polycentrism and to typologies of regions in other ESPON projects;

-The most relevant transport services of general interests, referring to migration and regional development potential, which influence the development of territories and regions lagging behind as well as territories and regions with a peripheral location or specific features (structurally weak areas, islands and mountain areas);

-The role of services of general interest as vectors for territorial cohesion: constitution of trans-European networks of services of general interest (in particular, in rural areas).

-The different kinds of complementarity and exchange processes (level of multi-modality) that exist between different kinds of infrastructure in different parts of Europe in support of sustainable transport.

-The importance of access to transport networks and services as a location parameter for investments and the economic development of cities and regions

-The correlation between transport infrastructure trends and a polycentric development model, including identification of an operational benchmarking system that could be applicable with regard to the data and indicators available;

-A further operationalisation and territorial diversification of the policy aims and options adopted in the ESDP, including an adaptation to the territorial diversities within an enlarged EU.

4.3.4-Description of a few suggestions of concepts and methodology to be analysed or used by the tenderer

The basic concept concerning indicators for accessibility for personal travel is the combination of different methodologies that are complementary to each other.

First of all, existing indicators for measuring the supply of transport infrastructure and services and accessibility will be reviewed. This will be done by analysing previous studies and existing databases, in particular those of Eurostat and the European Environmental Agency. The identification and gathering of existing indicators will also be guided by the reports for the Working Group 'Geographical Position' of the Study Programme on European Spatial Planning (SPESP) in which team members played a prominent role (Wegener et al., 2000; Mathis 2000).

Secondly, selected indicators of the existing indicators reviewed before will be demonstrated for the territory of the European Union and the twelve candidate countries. This will be done by presenting indicators on transport supply (such as road and rail densities) and the reference accessibility indicators of the potential type proposed in the Working Group 'Geographical Position' for NUTS 3 regions of EU-15 and equivalent regions of the candidate countries and neighbouring countries such as Switzerland and Norway. The possibility of extending other accessibility indicators for personal travel will be checked and performed if possible.

Thirdly, based on an analysis of the indicators demonstrated before, new indicators showing the interrelationships between the supply, trends and impacts of transport infrastructure networks and services and territorial features, such as the degree of polycentrism, accessibility to different types of regions and territories, areas lagging behind, inter- and multimodality and missing links for improving sustainable European passenger transport and the territorial integration of the candidate countries will be developed.

Fourth, the indicators developed before will be demonstrated. The philosophy to do this is to make use of the plurality of the different approaches and tools available in the project consortium, i.e. at the research institutes of project partners and sub-contractors. Some of the indicators will be very comprehensive, e.g. multimodal and intermodal accessibility indicators, some might be very specific, e.g. addressing coastal shipping, some of the indicators will be calculated for NUTS 3 and equivalent regions, some of the indicators can be presented in innovative graphical form only (e.g. chronocartes, time-space maps). Most of the indicators will be calculated for pan-Europe, however, there will be some indicators that can be demonstrated for specific areas only.

Finally, those existing and newly developed indicators that can be calculated for NUTS 3 regions will be collected in an integrated database. Analysis and mapping tools to be

developed will allow the comparative processing and the comparison of different indicators in numerical or cartographic form, the combination of indicators to new indicators, advanced spatial analysis and the spatial aggregation of indicators to the level of NUTS 2, 1 or 0. The integration step will provide the base for the development of typologies of European regions revealing risks and potentials and will serve as platform for data exchange with other parts of the ESPON 2006 programme.

In this way, the proposed concept of combining state-of-the-art and newly developed methodologies to generate indicators describing different aspect of accessibility for personal travel in Europe will result in tangible and innovative results.

The most considerable progress since the SPESP (« Study Program on European Spatial Planing ») is the emergence, the grip of conscious ness, the necessity of a not only multimodal but also multiscales (spatial and temporal) analysis, of micro and macro-analyses and also of multihypotheses (different hypotheses since the level of the agent, the individual until the level of the group, the aggregate).

This is called in our work: " the multilevel approach".

The difficulty of this analysis is established by the relations between the levels which, according to us, are made by means of the space (where from the application of methods of passage of type zoom, fractals, the simplifications or the extensions of networks...).

Through this approach, polycentrism will be the object of a detailed reflection as well as the spatial cohesion, the access in the basic services, the access in the knowledge, or the quality of service of transport....

An example of new demand for data bases is to have not only geo-coded networks by coordinates in the same system but still to have the heights of nodes.

It would permit us to calculate the emissions of pollutants by vehicles, heavy goods vehicles (emissions which are very different in ascent, descent and flat).

An analysis in detailed levels would require the arrangement of a precise MNT (" *Numeric Model of Ground* ") on the scale of all Europe.

4.3.5-Desription of the data sources, which the tenderer intends to exploit for data-gathering, indication…

Networks described by the data base should be geocoded where from the use of a GIS with the possibility of simplifying polylines, of choosing the levels of nodes to be considered (knowing that the modelling becomes long and expensive beyond 1000 knots) what corresponds in the use of NUTS 3 for the EU.
Basic source of the data describing the supply of transport infrastructure and of other key transport indicators will be the databases of Eurostat and the European Environmental Agency. However, it might be necessary to include national data sources, in particular for the

candidate countries, as well. The collection of those data will be done in co-ordination with the data collection actions of ESPON under priority 4.

Basic source for network data will be the GISCO road and rail database. In addition, the pan-European road, rail and inland waterway network data base developed at the Institute of Spatial Planning of the University of Dortmund (IRPUD) can be utilised for the project through the partners of S&W due to their former affiliation with IRPUD. Compared with the Eurostat database, the IRPUD network database has important advantages for accessibility modelling in terms of attributes such as rail travel times, speed limits, the evolution of the trans-European transport network (TEN and TINA) since 1981 up to 2016.

In addition, the partners and sub-contractors will utilise their own databases for the calculation of specific indicators.

4.3.6-Desription of a few suggestions for territorial indicators

For the theme of passenger transport there are three broad types of territorial indicators, the existing, the newly developed and the integrated indicators describing the European territory in terms of transport infrastructure supply and accessibility.

The existing indicators are those derived from a review of previous studies, in particular taken from the final reports of the Working Group 'Geographical Position' of the Study Programme on European Spatial Planning (SPESP) (Wegener et al., 2000; Mathis 2000). Those indicators will be demonstrated for EU 27, either for NUTS-3 regions or in cartographic form. A final list will be established in the inception phase of the project, but the indicators will include the following:

- indicators describing the supply of transport infrastructure and services such as road and rail densities, passenger cars per 1000 inhabitants; indicators are mainly based on Eurostat databases
- indicators describing the use of transport infrastructure such as passenger kilometres for car and rail and number of air passengers; indicators are mainly based on Eurostat databases,
- the reference accessibility indicators of the potential type proposed in the SPESP Working Group 'Geographical Position', i.e. accessibility to population by road, accessibility to population by rail, accessibility to GDP by air,

The new indicators for passenger travel to be developed in the course of the project will all be accessibility indicators. Because this is a creative and innovative element in the proposed project, it is difficult to precisely define all indicators at this stage, however, the following indicators will be included:

- further development of the SPESP modal accessibility indicator to a multimodal accessibility indicator by testing ways of aggregation such as fastest mode and logsum aggregation,
- further development of the SPESP modal accessibility indicator to an intermodal accessibility indicator allowing for change of transport mode during a journey,
- accessibility indicators on the base of time-space geography, i.e. taking account of constraints in time and space and of transport services offered, indicators include daily accessibility and commuting accessibility,

- new time-space maps showing spatial variations in the speed of transport networks and its development over time
- quasi-continuous accessibility surfaces with 3D representation for showing 'valleys' of low accessibility between major network nodes even in the core of Europe

Finally, the integrated indicators will be combinations of the previously listed indicators and combinations also with freight indicators, aggregated indicators derived from cluster analysis, cohesion indicators for accessibility, or spatially aggregated indicators.

Freight indicators can be improved in order to take better into account the specifications of the modes and the users needs.

From the supply side it is important to recall that policy priorities put the stress on alternative modes mainly rail, inlands waterways, short sea shipping and intermodal transport which can be a combination of rail, road (different techniques) sea-road, sea-rail but also the possible combination with inland waterways including inland waterways sea for serving major ports but also inland waterways and rail which is rarely enough considered except along the Rhine Valley.

But the focus put on alternative modes introduce several constraints in the system of transport to be taken into account : these modes are less flexible than road transport, they most of the time operate more efficiently with economy of scale, and they require specific modal investments and equipments. This means that not only infrastructure but also the available services must be considered which most of the time, cannot be derived easily from a time table (they adapt to the demand).

The transport service will result from a sequence of consolidation and deconsolidation operations. This is obviously the case for intermodal transport where location of terminal has to be implemented on GIS ; their potential hinterland has to be defined whether they are port terminals or inland terminals.

In the case of a polycentric model it is then interesting to investigate whether new zones of interrelation between cities and areas can be considered or not as a privileged zone of concentration, deconcentration of services so that services of alternative modes can be improved and become more efficient in terms of cost and frequency of services.

This question of efficiency of services of alternative modes is also an essential line of improvement of the definition of indicators. For rail it is clear that they are different types of operating systems from single wagons assembled in marshalling yards, to “block trains”, “shuttle trains”, coupled trains, terminals can be functioning as collecting or distributing centres but also as “gateways” not only in major ports (for intercontinental transport) but also in front of natural barriers (Alps, Pyrenees and more and more often before crossing dense area or congested corridors). These different operating systems have quite different performances in terms of cost, time, reliability to a point which influence in a very significant way the accessibility indicators as shown in recent researches (EUFRANET : on dedicated freight network, IQ on Intermodal Quality, Recordit on cost of intermodal transport, LOGIG on the decision process for the choice of intermodal transport).

The allocation of slots for freight, as it is for air transport, will then be a fundamental element of the performance of the modes. Such approach mentioned for rail, must be also detailed and

adapted to an in depth analysis of operating system of other alternative modes such as short sea shipping inland waterways.

In the recent transport policy document, the "White Paper" of DG TREN, a priority is put on the re-equilibrium between modes and on the fact that more priority for freight must now be considered) : an alternative mode will be competitive, and reduce damages on environment only if it is operated in an efficient way. The services of the alternative modes must be adapted to the pattern of demand flows : progress in transport simulation can improved the estimate of transport indicators measured in prices and time.

The structural reorganisation of transport sector, with a distinction between infrastructure manager and transport operator will then also have an influence : infrastructure pricing influences the choice of the route of transport as shown in the transalpine crossing : this aspect should also be investigated in the appraisal of accessibility when alternative routes give alternative choices and different prices of transport.

To summarise these considerations on the impact of supply and operating must be pointed out that progress made in assignment of network, choice of route, analysis of the size of the shipment as regards the technical characteristics of a mode must be used to improve at the same time the indicators progressed in particular when alternative modes are concerned. For international services interoperability improvement will have also an influence.

From the demand side, it is clear that the main objective is to assess the adaptation of transport services to the shipper requirements ; for the shipper or final user the transport is part of the logistic chain including transhipment, storage, inventory, security and eventually packaging. For the transport indicators this means concretely to take into account not only prices (or costs), time, but also reliability, adaptability (to specific logistic requirements or to change in demand), security. This quality factors are difficult to quantify but some techniques (as state preference techniques) have shown how they are important in the utility functions, with difference according to the type of products ; industrial logistics chain will also have different constraints from distribution chain from this quality point of view.

At that stage it is difficult to propose and indicate which include quality factors since this will suppose extensive surveys and differentiation between markets. But specific analysis of corridors, and results of THINK UP thematic network, which propose a segmentation of the European market and trends for these segments can be differentiated as regards not only trends but also sensitivity to modal shift, can be used to make an investigation on improvement of indicators.

From this point of view it is then clear that improved tools of network description, including information relative to operations (dynamic information) must be used. This will be an important part of the analysis of the implementation of these new indicators using results of the former projects mentioned with an output which will be, in that case, not a simulation of transport demand or eventually a projection of the demand but improved regional (and possibly some sub-regional indicators to nodal points of European network) indicator for accessibility.

Potentiality of improvement of these indicators as regards major transport policy priorities (priority for freight on some lines for example), or as regards changes in location of industries or distribution centres can also be investigated once all the required elements will

be introduced in the tool which is in general not the case in more classical indicators where most of the time only improvement in infrastructure can be taken into account.

Finally indicators can also be considered as regards implementation policy constraints and institutional context : cities, regions, countries, European institutions take part in the implementation of a transport policy in a concerted way. Indicators can be adapted to regional, national, European accessibility concept and be articulated in order to construct a multilevel transport system with privileged modes of interfaces between different spatial transport systems. The polycentric approach would also benefit from this spatial multilevel understanding of the implementation of a long term policy including infrastructure and operating systems.

The classic indicators that one can obtain from data bases (lengths networks, number of vehicles, drawing of the network...) are only little explicit for the spatial aspect and for the access to knots (so to the services).

One will use as new spatial indicator : « *the fractal dimension* » which summarises the morphology of the network (it is the only current morphological indicator) by characterising the type and the sharpness of the meshing of the network for a given space.

One will also use indicators as the distance, the cost and the access time in such network or in such services evaluated « *very close* », the importance of the population situated in such distance or in so many minutes from an access point, all this be calculated with a multimodal approach

Another additional, very useful indicator for recommendations is the quality of service supplied by an offer of transport.

For example, « *the possible number of hours to be spent, in such or such city from the others, by leaving in the morning and by returning in the evening by the various modes* » (individual vehicle, transport by railways by air...) and in multimode because estimated « *very close* ».

It allows us to identify the territorial disparities of access to the work, to the services, to the culture....

The team will develop new indicators to estimate the conditions of polycentrism in terms of transport, spatial cohesion, access to the basic services, knowledge, quality of services of transport, according to regions, types of populations....

Specific thematic cartographies and hypermap will be developed to illustrate these results.

4.3.7-Description of the approach to developping territorial typologies

The different types of methodologies and transport and accessibility indicators developed in the project will provide an enormously rich database to develop territorial typologies. On the one hand, it is possible to generate spatial typologies for single indicators, i.e. for specific purposes. Examples could be regions benefiting in terms of accessibility from investment in high-speed rail infrastructure and regions not connected or regions benefiting from international and intercontinental air connectivity. Some indicators can be expressed in maps only, here, innovative cartography will lead to an immediate recognition of spatial typologies. On the other hand, the tools for combining, aggregating and analysing the indicators developed separately aim directly at the generation of sophisticated spatial typologies based on a variety of different transport related indicators.

The typologies will be developed from these new indicators and will be presented from hypermaps adapted to every public: scientists, administrators, decision-makers and politics but also "general public"... .

The principle of hypermaps is simple: it uses the same principle as the hypertext but transferred to the image with a contents adapted to the user and an important didactic reach.

The objective being to make perceive a phenomenon without caricaturing it by allowing an understanding of the concerned public while leaving him a freedom of navigation which makes a tool that he can appropriate himself.

This tool was tested by the CESA on young people and it turned out effective.

4.3.8-Description of the envisaged approach to recommendations that could inspire policy development at different scales

At first, the recommendations will concern the offer of transport by means of networks and infrastructures.

The objective is here to assure a better balance of the various zones while taking into account geographic and cultural differences which can be considered as wealth.

This objective recuts that of the spatial cohesion and aims at facilitating the exchanges, the access to the services and to the knots of networks of infrastructure and the establishment of companies.

It should also consider the " missing bars ", the saturations of corridors, the consecutive pollutions, the effects on " crossroads countries" of the extension of EU.

The recommendations will concern just as much the quality of services which infrastructures offer to the populations (measured at time and\or in cost), the access to the services of general interest, to the knowledge, when on the multimodality, the durability of the transport system (beyond the simple minimum of offer and this in various scales).

This durability should take into account the consumptions of energy, space, the emissions of visual, hearing and chemical pollutants and their effects on the populations, not only in term of risks of conflicts, accidents but also of vulnerability of networks, and impacts on the environment.

In this context, a particular attention will be tuned to the evaluation of polycentrism and to its material conditions of development by transport systems.

The objective being to end in « kits » of operational recommendations the consequences of which will have been lit by the forward-looking modelling with average and long term, among which the committee and the political decision-makers can choose the measures that they wish to put it to work.

4.3.9- Description of interaction intended for the thematic co-ordination and networking with other projects

The project is depending on intense interaction with other ESPON projects.

The project will develop close links with ESPON action 1.1.1 on urban areas as nodes of polycentrism in order to benefit from the concepts of polycentrism developed there

The project will particularly develop close interaction with ESPON action 2.1.1 on territorial impacts of EU transport and TEN policies in order to develop a common approach with respect to reference accessibility indicators which are relevant for both projects.

For the question of data collecting and data providing close links will be established to ESPON actions 3.1 on integrated tools for spatial development and 4.1 on data navigation.

The group 1.2.1 should supply data notably in the subjects 1.2.2 , 2.1.1 and 3.1, elaborate results and concepts of height - level which allow them to take into account the development of networks and to integrate these into the more general study of polycentrism and impacts on transport systems.

This coordination will be facilitated by the « national *focal point* »: the UMS RIATE, integrated into our team.

5-TIME MANAGEMENT ASSIGNEMENT OF HUMAN AND FINANCIAL RESOURCES TO THE VARIOUS TASKS AND QUALITY OF THE TEAM INVOLVED

5.1-LIST OF TASKS AND PROPOSED ALLOCATION OF FINANCIAL RESOURCES TO EACH TASK AND TO EACH PARTNER

The list of task resume those of restricted call 121 :

-Work Package 1 : Project management

-Work Package 2 :State of the art

a)Territorial indicators, adapted data-base and map-making.
b)Requests for statistical and geographical data-base.
c)Concepts, methodology and hypothesis for investigation.

-Work Package 3 :Existing indicators

d)Preliminary results of territorial indicators showing the existing spatial structure of transport infrastructure networks and services (degree of polycentrism, accesibility…).
e) Existing concepts

-Work Package 4 :New indicators

f)New data-base about development of transport infrastructure networks and services.
g) Second request for further territorial indicators.
e)bis First overview on new concepts and methodology possible final results.

-Work Package 5 :Implementation of advanced indicators

(g) Main results of the research (data-base, available territorial indicators, map-making, trends and impacts of transport infrastructure networks and services…).
(h) Preliminary results on the significance of transport infrastructure networks and services.
(i)Development of appropriate tools for the processing of the new data-base, indicators and map-making.
(j) Systems for the monitoring of new trends of territorial developments.
(k) Typologies of regions revealing risks, potential for the types of regions.
(l) Policy recommendations to improve parity of access to infrastructure including institutional settings and instruments (peripheral and ultra-peripheral regions).

-Work Package 6 :Horizontal system integration

-Work Package 7 : Horizontal mapping, presentation and dissemination of results

p) Presentation of access points and concrete ideas for policy responses to the territorial trends at different scales.
q)Presentation of the developed territorial indicators, concepts and typologies.
r) Presentation of the data-base and the mapping facilities developed.

-Work Package 8 :Presentations and conclusions

m) Summary of the main results of the research, recommendations for policy development.

o) Comprehensive presentation of supply, trends and impacts of transport infrastructure networks.
s) Listing of further data requirements and ideas of territorial indicators, concept and typologies.

So as we have already indicated, the tasks will be divided in 8 Work-Packages :

N°	WORK-PACKAGES	CONTRACTORS
WP1	***Project Management***	**CESA-INRETS**
WP2	***State of the Art***	**CESA**
WP3	***Preliminary results with existing indicators***	**CESA**
WP4	***Definition of new concepts, methods and advanced indicators***	**NESTEAR**
WP5	***Implementation of advanced indicators***	**S&W + Mcrit**
WP6	***System integration***	**Mcrit + S&W**
WP7	***Mapping, presentation and dissemination of results***	**CESA-INRETS+ UMS RIATE**
WP8	***Policy recommendations and conclusions***	**CESA-INRETS**

The proposed allocation of financial resources to each task and to each partner is :

ALLOCATION OF RESOURCES FOR THE TASKS OF PARTNERS		
PARTNERS	**TASKS**	**ALLOCATIONS OF RESOURCES**
CESA-INRETS (Lead-Partner)	**WP 1,2,3,7,8**	***100000 Euros***
NESTEAR (Private Partner)	**WP 4**	***90000 Euros***
MCRIT (Private Partner)	**WP 5,6**	***90000 Euros***
S&W (Private Partner)	**WP5,6**	***90000 Euros***
Total for the tasks of partners	**********	***370 000 Euros***

ALLOCATION OF RESOURCES FOR THE TASKS OF SUBCONTRACTORS		
SUBCONTRACTORS	**TASKS**	**TOTAL**
-Piet RIVELD, **-Paola PUCCI,**		

5.2- PLANNED CALENDAR OF THESE TASKS INCLUDING MEETINGS AND PROPOSED DEPLOYMENT OF THE TEAM FOR EACH TASK

The tasks will be divided into for reports :

First interim report : September 2002 :

-Coordinator CESA : WP2 State of the art

a)Territorial indicators, adapted data-base and map-making.
b)Requests for statistical and geographical data-base.
c)Concepts, methodology and hypothesis for investigation.

-Meeting in third week of July 2002

Second interim report : February 2003

-Coordinators CESA INRETS : WP3 Existing indicators

d) Preliminary results of territorial indicators showing the existing spatial structure of transport infrastructure networks and services (degree of polycentrism, accesibility…).
e) Existing concepts

-Coordinator Nestear : WP4 New indicators

f)New data-base about development of transport infrastructure networks and services.
g) Second request for further territorial indicators.
e bis) First over view on new concepts and methodology.

-Meetings : November2002 and January 2003

Third interim report : August 2003

-Coordinators S&W and Mcrit WP5

(g) Main results of the research (data-base, available territorial indicators, map-making, trends and impacts of transport infrastructure networks and services…).
(h) Preliminary results on the significance of transport infrastructure networks and services.

(i)Development of appropriate tools for the processing of the new data-base, indicators and map-making.
(j) Systems for the monitoring of new trends of territorial developments.
(k) Typologies of regions revealing risks, potential for the types of regions.

(l) Policy recommendations to improve parity of access to infrastructure including institutional settings and instruments (peripheral and ultra-peripheral regions).

-Meetings : May 2003 and July 2003

Final report : August 2004

-Coordinator Mcrit and S&W :WP6

horizontal and integrated system

-Coordinator CESA : WP7

Presentations and conclusions

-Coordinator UMS RIATE : WP7

Communication and horizontal spread

m) Summary of the main results of the research, recommendations for policy development.
o) Comprehensive presentation of supply, trends and impacts of transport infrastructure networks.
p) Presentation of access points and concrete ideas for policy responses to the territorial trends at different scales.
q) Presentation of the developed territorial indicators, concepts and typologies.
r) Presentation of the data-base and the mapping facilities developed.
s) Listing of further data requirements and ideas of territorial indicators, concept and typologies.

-Meetings : February and June 2004

We can summarise this in the following table :

REPORTS	MEETINGS
First interim report : September 2002	*-Partners : July 2002*
Second interim report : February 2003	*-Partners and subcontractors : November 2002* *- Partners : January 2003*
Third interim report : August 2003	*-Partners and subcontractors : May 2003* *-Partners : July 2003*
Final report : August 2004	*-Partners and subcontractors : February 2004* *-Partners :June 2004*

So, the planned calendar of the tasks is :

D1	***First interim report: State of the Art***	**WP2**	***CESA INRETS***

D2	***Second interim report: Preliminary results and concepts***	**WP3 WP4**	***CESA NESTEAR***
D3	***Third interim report: Main results***	**WP5**	***S&W + Mcrit***
D4	***Final report: Policy conclusions and integrated system for monitoring***	**WP6 WP7 WP8**	***CESA and all partners***

PLANNED CALENDAR FOR TENDER N°2002 ESPON 1.2.1																												
YEARS	**2002**							**2003**													**2004**							
MONTHS	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	
REPORTS	***First interim report***				***Second interim report***					***Third interim report***							***Final report***											
TASKS	***State of art***				***Preliminary results and concepts***					***Main results***							***Policy conclusions and integrated systems for monitoring***											
WP & PARTNERS	**WP 1 :Project management** **CESA**																											
	WP 7 : Mapping, presentation and dissemination of results **UMS RIATE**																											
	WP 2 : State of the art **CESA-INRETS**				**WP 3 :Preliminary results with existing indicators** **CESA-INRETS** **WP 4 : Definition of new concepts, methods end advanced indicators** **NESTEAR**					**WP 5 : Implementation of advanced indicators** **S&W** **MCRIT**							**WP6 :System of integration** **WP7 Mapping, presentation and dissemination of results** **WP8 : Policy recommendations and conclusions** **CESA and all partners**											
MEETINGS		*				*			*			*		*							*				*			