

# 2<sup>nd</sup> General Meeting of the PLUREL project

10 – 13 October, Leipzig

Programme details & Book of abstracts

PLUREL: PERI-URBAN LAND USE RELATIONSHIPS, Strategies and Sustainability Assessment Tools for Urban Rural Linkages; European Commissions Sixth framework programme for research (contract no. 036921)



Programme details and book of abstracts is organised in three sections:

Plenaries (p. 3) Parallel workshops (p. 11) Module meetings (p. 15)

	Wednesday, 10.10.07	Thursday, 11.10.07	Friday, 12.10.07	
9.00 - 9.30		Plenary (room 1A + 1B)	Plenary (room 1A + 1B)	
9.30 – 10.30		Module meetings	Module meetings	
Coffee	Arrival	Coffee break	Coffee break	
11.00 - 12.30	Arrivai	Module meetings	Market place (Foyer)	
Lunch		Lunch	Lunch	
14.00 - 14.30	Plenary (room 1A)	Module meetings	Plenary (room 1A + 1B)	
14.30 – 15.30	Plenary (room 1A)	Module meetings	Module meetings	
Coffee	Coffee break	Coffee break	Coffee break	
16.00 – 18.00	Plenary (room 1A)	Parallel workshops (rooms SR SL 112;	Plenary (room 1A + 1B)	
	Module meetings 17:00-18:00	1C & 1D)	(100m 10 + 10)	
18:00	Plenary (room 1A)	18:00 Transfer to City Centre	Dinner	
18:30	Icebreaker with Lecture on 'Shrinking Cities' by Tim Rientiets and Dinner (Hall 1B, C, D)	Welcome by Mayor of Leipzig, Mr. zur Nedden Conference dinner (City Centre)	20:00 Training session	



# **Plenaries**



Wednesday 14.00 - 14.30, room 1A

Opening session

Welcome by UFZ and KU

Scientific officer, Karen Fabbri, DG-Research

<u>Hilda Blanco, University of Washington:</u>
Recent Research on State-wide Growth Management Efforts in the US.

Wednesday 14.30 - 15.30, room 1A

M1 plenary

Scenario framework, Mark Rounsevell, UEDIN

No abstract.

#### Economic futures, Baptiste Boitier, Pierre Le Mouel, ECP/UP1

Abstract:

This contribution presents the general methodology for economic scenarios building with NEMESIS model.

It first exposes the different methodologies used in economic literature to design baseline scenarios, from Business as Usual Scenarios (BAU) that are simple extrapolations of past trends, to the "Imaginative Approach" that will be used in PLUREL 'shock' scenarios: Rather than making simple assumption on what is likely to happen, they investigate things that may come to pass with unknown probability ('hard uncertainty'), namely rapid sea level rise, technologic breakthrough, pandemic and extreme oil shock.

The second part of the presentation illustrates, with the example of SENSOR scenarios, the methodology used to build economic scenarios with NEMESIS. SENSOR uses a set of three baseline scenarios, 'Lowgrowth', 'Medium-growth' and 'High-growth' defining, with the help of experts knowledge on the likely evolution of key drivers (mainly growth rate of world production, price of petroleum on world markets, demography and technical progress), a range within which the 'real' future will be contained, in absence of unexpected shock (inclusive approach).

The third part explains then how NEMESIS could design PLUREL A1, B1, A2 and B2 'trend' scenarios that belong to the same family than SENSOR scenarios (Inclusive approach), but with a special emphasis on drivers such as changes in policies, institutions and culture, that do not play an important role in SENSOR economic baselines, even if they can take importance for land-use and sectoral analysis (Tourism, Housing, Transportation, etc.).

The fourth part shows finally how PLUREL 'Shock' scenarios will be produced, as an accentuation of key drivers of A1, B1, A2 or B2 'trend' scenarios, mainly.



#### Demographic futures, Vegard Skirbekk, IIASA

#### **Abstract:**

I will present probabilistic population projections for 27 EU countries. The base projection year is 2006. For each country the population by single year of age and sex is projected up to 2050. The mean assumptions for fertility, mortality and net migration is made consistent with the (deterministic) median variant assumptions of Eurostat projections. The Eurostat low and high variants are assumed to bound 90 percent of all the future cases. These probabilistic population projections are complementary to Eurostat population projections for the EU countries, since they provide a statistically more consistent measure of uncertainty of the population projection outcome.

#### Baseline for environmental change, Joe Ravetz, UM

No abstract.

Wednesday 16.00 - 17.00, room 1A

M2 plenary

RUR-typology, Klaus Steinnocher, ARC

#### Abstract:

The presentation will describe the development of the rural-urban regions (RUR) typology as a quantitative classification with respect to spatial patterns, morphology and population trends. The development of the typology is based on data sets that are available for EU 27 including CORINE land cover (CLC) 2000, population 2000 and 2004 on NUTS 3 level and on population of cities 2000 and 2006.

In order to develop the final typology an intermediate classification of single NUTS3 regions is performed. This classification is based on ranking of cities by population per NUTS 3 area. First NUTS3 regions without cities are defined as rural, and then the size of cities is used to differentiate metropolitan areas, urban centres and smaller settlements. In the final step the number of cities is taken into account in order to distinguish mono- and polycentric structures.

In a second step spatial clustering of NUTS 3 areas is performed resulting in the final RUR types. Depending on the size and number of cities within the clusters and the type of the clustered NUTS 3 areas one of the final RUR types is assigned:

1.0	_	Metropolitan
1.1	_	Urban mono-centric
1.2	_	Peri-urban mono-centric
2	_	Urban poly-centric
3	_	Peri-urban poly-centric
4	_	Deep rural

Finally the RURs were analysed with respect to their population development. For the types 1.x and 2 population dynamics of the urban centres and of the peri-urban areas and hinterland were compared, for the types 3 and 4 the overall population dynamics were considered, resulting



in 4 possible types: decline-decline, decline-growth, growth-decline and growth-growth.

<u>Typology of EU national governance and spatial planning systems, Ivan Tosics, MRI & Kostas Lalenis, UTH</u>

#### Abstract:

WP2.2 aims to produce a systematic overview of existing planning and administrative systems in EU member states. This presentation is the first step of this task and it will provide a review of the existing typologies in: a. territorial government, and b. national spatial planning concepts for the EU member states.

In examining the existing typologies in territorial government, formal government structures will be explored. This will involve the analysis of the basic units (local governments), of the intermediate subnational tiers of the administrative structure, and of other government policies affecting sub-national governments. A draft typology will be established, related to the competence given to local governments, and the existing typologies provided by ESPON 3.2 will be analysed, based on state structures / regionalization. Finally, an attempt will be made to connect the two previous topics to each other, i.e. the typology of the basic, municipal units will be analysed together with the dynamic changes regarding the 'middle tier', i.e. the sub-national level(s) of government.

In the field of national spatial planning concepts, the two main existing typologies will be described, i.e. a. National Planning Systems (Newman and Thornley, 1996 and ESPON) and b. Traditions of Spatial Planning (EU

typologies will be described, i.e. a. National Planning Systems (Newman and Thornley, 1996 and ESPON) and b. Traditions of Spatial Planning (EU Compendium of SPSP / 1997). An assessment of the usability of these typologies will be attempted, given that both of them refer to mid and late '90s. Finally, a proposed classification of ESPON 2.3.2. will be described, which takes into consideration the weak points of the previous typologies and it is based on a combination of the taxonomies produced by NORDREGIO for ESPON 3.2 project and the categorization of cases in terms of devolution of spatial planning powers produced for ESPON 2.3.2.

Thursday 09.00 - 09.30, room 1A & 1B

M5/6 plenary

Data management, Wolfgang Loibl, ARC & Steve Peedell, JRC

#### Abstract:

First the PLUREL data management principles will be presented: The data requirements for the modules and the necessity of data sharing Metadata reporting, data upload, (and download)
Data harmonizing, data quality check & integration
Map portal and data warehouse - retrieval, view and download

Then we will give an overview of the structure of the requested data sets Geo-spatial data: vector, point, polygon, raster (variables integrated) geo-related tabular data: 1st column must contain ID-number of the spatial entity, first row must contain variable names Accepted file formats



We will further discuss requested data, the necessary scales and resolutions (Europe vs. case study regions) for the following issues: Planning, population and society, housing Economy, employment, traffic, commuting Energy supply, air-, water- and soil pollution Food supply, open space quality

Metadata will be explained regarding meaning, purpose, volume. The metadata/data upload system training will be announced. Finally the map portal and data retrieval tool will be presented.

#### Economical and social science coordinator, Simon Bell, ECA

#### Abstract:

This is the first report from Simon Bell, the social science coordinator. He has participated in a number of meetings, notably M2, M3 and M4 as well as M5 Scientific committee. Since ECA has work in M2 and M4 is normal for him to attend these modules, where much of the direct social science-based research is taking place. He attended the stakeholder meeting of M3 in Koper where he was able to present some observations on the way M3 is developing. At this point, therefore, it is possible to see how the research is developing and to see where the integration of social science is or is not happening according to the ambitions of the project.

Friday 09.00 - 09.30, room 1A and 1B

M3 plenary

Stakeholder integration, Carmen Aalbers, Wim Timmermans, Alterra

#### Abstract:

A short presentation of the participation model based on Kickert will be given by Carmen Aalbers. Followed by a discussion with the different Modules about what participation form they envisage and how the would like to proceed for that. This session should help get a broader understanding of how PLUREL can meet stakeholders involvement.

Friday 10.30 - 12.30, KUBUS foyer

PLUREL meets cases - open market session

#### Abstract:

Researchers will present and discuss research and modelling approaches on 10 different poster stands. Coffee will be served in parallel to the Open market session.

NOTE THAT THE OPEN MARKET SESSION WILL TAKE PLACE IN THE KUBUS ENTRANCE HALL!



#### Friday 14.00 - 14.30, room 1A and 1B

#### M4 plenary

### Conceptual model for a Rural-Urban region, Dagmar Haase, UFZ Abstract:

The first presentation of Module 4 will mainly focus on the current state of work on the conceptual functional model for a rural-urban region (RUR). In a first part, the paper provides insights on our discussion of fundamental causal relationships between the major components and variables of a rural-urban region and it identifies major variables involved (demographic, social, economic, transport, land use, environmental, political ...). Due to the heterogeneity of rural-urban regions throughout Europe and the selectivity of major driving forces within different case study regions we aim at developing causality models at different levels of detailedness: at a general level ("model of models"), further models for city-region types as well as models for specific questions/problems outlined by the case study regions. Thereby the choice of variables is related to the concepts of "Ecosystem Services" and "Quality of Life". In a second part, the presentation discusses possible methodologies, models and tools to quantify (most of) the above mentioned causalities using numerical and rule-based algorithms based on quantitative and qualitative data provided by the cases.

## <u>Indicators on Ecosystem Services and Quality of Life, Felix Muller, CAU and Simon Bell, ECA</u>

#### Abstract:

In the framework of a comprehensive assessment of the PLUREL scenario outcomes it is necessary to develop an indicator set which is capable of aggregating the respective information from the case study areas. Furthermore, for the extrapolation to other landscapes and scales it is important to filter the input information for the application of the SIAT software. For these purposes and for the creation of an interdisciplinary evaluation platform, we will derive indicators on environmental, social, and economic features. The indicator set will be based on an application of the DPSIR scheme from the EEA with respect to the focal PLUREL objectives. In the presentation we will concentrate on a discussion of the basic conceptual model and the indicator groups "Ecosystem Services" and "Quality of Life".



Friday 16.00 - 17.00, room 1A and 1B

**Summary session** 

Summary of the Leipzig meeting by Module leaders and Project Management.

Friday 17.00 - 18.00, room 1A and 1B

Reviewers session

Contributions from Hilda Blanco, Christer Bengs and Pam Warhurst.

Friday 20.00-21.00, room 1A and 1B

Training sessions

Web-editing of PLUREL webpages, Thomas Sick Nielsen, KU

Representatives of the modules and the organisations leading modules are expected to attend. Instruction will be given on how to edit webpages at the PLUREL website (<a href="https://www.plurel.eu">www.plurel.eu</a>).

The training session on dataupload has been rescheduled to Friday at 9.30 as part of the module 5 meeting. Representatives of the case study teams are expected to attend.





# Parallel Workshops



# Structuring the SIAT-RUR

Thursday 16.00 - 18.00, room SR SL 112

Chair: Katharina Helming & Katharina Fricke, ZALF

#### **Expected participants:**

one representative from each module; in particular: M1 responsible person for scenarios and land use simulation, M2 responsible person for RUR typologies and responsible person for response functions, M4 responsible person for indicator selection, M5 responsible person for data management

#### **Objective:**

To derive a common understanding of the logical approach towards SIAT-RUR

The preliminary concept of the SIAT-RUR is based on the discussion at the preparation meeting for the first end-user meeting in Brussels on the 28th of June 2007 in cooperation between the Project Coordinator, the PLUREL module leaders and the responsible WP 5.3 team. The general concept towards the SIAT-RUR will be presented in short as well as the single components from the contributing modules.

Besides contextual issues (regarding the type of input and output variables of the response functions as well as the indicator selection), the presentations will also consider driving forces and scenarios, land use change simulations and the RUR typologies.

In the subsequent discussion, also open points concerning issues of end user dedication as well as the scale of projection and analysis will be clarified.

#### **Expected outcome:**

To identify and dispel inconsistencies in the common understanding of the SIAT-RUR concept and to achieve an agreement of a common understanding of the SIAT-RUR

#### Preliminary agenda:

16:00 h	Concept for SIAT-RUR (M5; Katharina Fricke)
16: 10 h	Land Use Functions (LUF) as integrating approach towards Impact
	Assessment (M5; Katharina Helming)
16:20 h	Land use change simulation (M1; Mark Rounsevell)
16:30 h	RUR typplogy (M2, Klaus Steinocher)
16:40 h	Response functions for land use change and impact indicators (M2; Felix
	Müller ZALF)
16:50 h	Indicator selection and approach (M4; Felix Müller)
17:00 h	Discussion of the integration of result into SIAT-RUR and identification of
	next steps



# Planning issues in the case study regions

Thursday 16.00 - 18.00, room 1C

Chair: Terry van Dijk & Carmen Aalbers, Alterra

This will be a joint session with WP2.4. Carmen, M3, will provide a 20 minutes presentation on planning issues brought forward in the case studies, Gertrud will provide a 20 minutes presentation giving a somewhat more generic overview of regional policy instruments. A discussion will follow about linkages between the two works.



# Workshop on social and economic aspects

Thursday 16.00 - 18.00, room 1D

Chair: Simon Bell, ECA & Timothy Taylor, UBATH

#### **Agenda for Cross Cutting Workshop**

#### **Identification of key Cross Cutting Issues in Modelling (30 mins)**

- \* Key parameters of NEMESIS/MOLAND/other models that need to be harmonised
- \* Identification of way ahead towards harmonisation

#### **Integration of scenarios – CC/Demography** (20 mins)

\* how are they going to look? How to implement them? (Time frame for NEMESIS?)

#### **Stakeholder consultation – integration issues** (15 mins)

protocol for contact with stakeholders to avoid fatigue

#### **Cross Cutting Issues in Other Areas** (15 mins)

- \* Agent Based Models
- \* Cost Benefit Analysis:
- Discounting protocol (e.g. for long term infrastructure projects/CC effects)
- Other work on valuation in project? Ensure is complementary (e.g. UCD work)

#### **Dissemination issues for Socio-Economic Analysis in PLUREL:** (10 mins)

- \* Special issue of a journal? Suggestions for journal?
- \* A book?
- \* Timetable?

#### Aims of future Socio-Economic meetings in PLUREL (15 mins)

\* Identification of key issues/topics for a workshop discussion or cross cutting paper



# Module meetings



Room: SR SL 112

Topics of discussion:

Wednesday 17.00-18.00

Discuss work progress Deadlines reached so far

Thursday 9.30-10.30, 11.00-12.30, 14.00-15.30

Scenario Discussions Review the four storylines. Define implications for population, economic growth, land use change etc. (using Joe's table?)

Friday 9.30-10.30

**Eventualities** 

Friday 11.00-12.30

Open market session

Friday 14.30-15.30

Future dead-lines Next meeting



Room: 1C

	Wednesday, 10.10.07			
17.00 - 18.00	Introduction		ZALF	
	Development of response functions for NUTSX: example "open space"	WP2.3.1,2,10	ZALF	Felix, Ingo
	Discussion			
9.30 - 10.30	Thursday, 11.10.07  State of work and derived demands for generalisation and case independant methods	WP2.4	KLV	Dagmar
10.00	Discussion	****	,	26
	Selected land use relationships: first results and problems encountered (15 min. each)			
11.00 - 12.30	"Population"	WP2.3.3	ARC	Tanja
	"Economy, work"	WP2.3.6	PAS	Piotr
14.00- 15.30	"Housing, infrastructure"	WP2.3.5	Cemagref	Nathalie, Tina
	"Transport, commuting"	WP2.3.7	SYKE	Mika
	"Social issues"	WP2.3.4	Openspace	Simon, Susana
	Friday, 12.10.07			
9.30 - 10.30	Training session web editing and data upload (shift from evening session)			
11.00 - 12.30	Open Market Session			
14.30-15.30	next worksteps, reports and outlook			



Room: 1D

Wednesday 17.00-18.00

Glossary, to come to an agreement on common terms to adopt for our case study research.

Thursday 9.30-10.30 & 14.00-15.30

Which strategies (we already have identified the object of the strategies, which are the prioritized land use planning issues, we have the regional scale of our research, and our focus at the impacts in the urban fringe, but including an urban-rural interaction perspective), remain a NUTS discussion/embedded case for more indepth analysis, which generic questions: what should they reveal, how to remain open to regional differences and specificities and still to ascertain sufficient comparison.

Friday 11.00-12.30: Open market session

Posters should be displayed Friday from 11.00-12.30 hrs during the open market session. You will then enable individual visitors to get more familiar with your work.

Friday 9.30-10.30 & 14.30-15.30

Generic questions continued, relation to what criteria?



Room: 2A

#### Wednesday 17.00-18.00

 Status or work in each WP (approach, concept, work done so far, people employed ...)

#### Thursday 9.30-10.30

Model of models for a RUR (WP 4.1)

#### Thursday 11.00-12.30

ABM-approach (WP 4.2)

#### Thursday 14.00-15.30

- Quality of life indicators (WP 4.3)
- Ecosystem services indicators
- Empiric surveys and data

#### Friday 9.30-10.30

- Economic models (WP 4.4)
- Costs of policy implementation

#### Friday 11.00-12.30: Open market session

- WP 4.1
- WP 4.2
- CS Leipzig
- Working Group of Urban and Environmental Sociology (SUSOZ) of the UFZ

#### Friday 14.30-15.30

- Final discussion on open questions
- Working agenda for rest of first 18 months

Questions: dagmar.haase@ufz.de



Room: 2B

#### Wednesday 17.00-18.00:

Internal M5 meeting:
Progress report from WP 5.1,5.2,5.3:
What has been achieved?
Where are we with regards to milestones and deliverables?
Cooperation with other modules
Other issues to be discussed?

#### Thursday 9.30-10.30:

Internal meeting to discuss the integration of SIAT-RUR and the data management system

Thursday 11.00-12.30

participation in meetings of other modules

Thursday 14.00-15.30

participation in meetings of other modules

Friday 9.30-10.30

Training session on data upload + participation in meetings of other modules

Friday 11.00-12.30: Open market session

Friday 14.30-15.30:

Internal M5 meeting: Results from the Leipzig meeting Update of working programme in WP5.1, 5.2, 5.3 for the next six month (until the next meeting in Warsaw), agreement on revised milestones and deliverables