







# 4th PSC meeting

# 5 - 6 March 2013 Vienna EURAC.research WP-5







**WP-5** 

# **Technical progress**

- a) Activities
- b) Problems
- c) Linkage with the other Work Packages (WPs)
- d) Co-operation with other project partners (PPs)

# **Outputs, Results & Deliverables**

**Outlook and Discussion** 

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# Expected Outlook at 3<sup>rd</sup> PP/SC Meeting - End of RP5 (May, 2013)

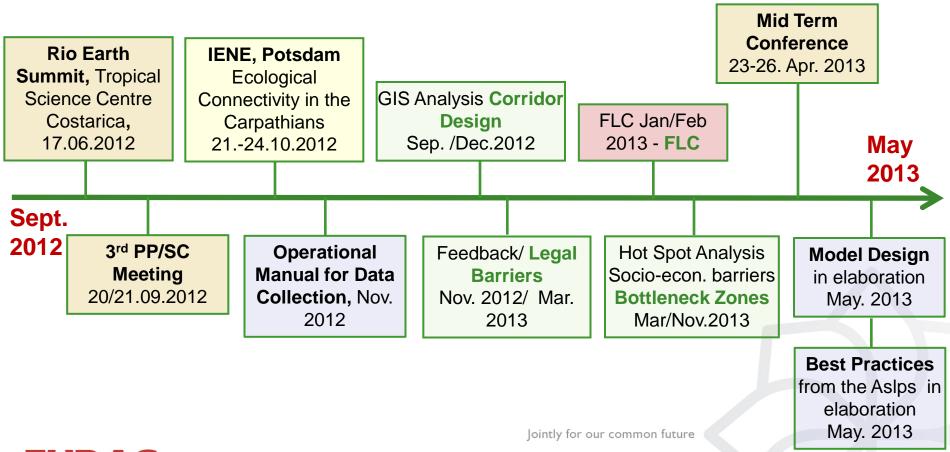
St	Stakeholder Consultation - cancelled			Stakeholder Interviews, Apr. 2013	
		Delay		In-depth analysis: Hot Spots, Apr. 2013	]
GIS Model Ecological Corridors PP5, Nov. 2012	of lega ecolog	nal Reports al impacts on ical corridors Feb. 2013		Pilot Area Analysis, Interrelation with eco -logical networks in the CC area, Mar. 2013	May
Sept. 2012				eports of legal impacts , Feb. / Apr. 2013	2013
<b>EUR AC</b> resea		Delay		Web GIS: PP5, Mar. / May 2013	3







## a) Progress of WP5 – Activities in RP4/5













# a) WP5 Activities – RP4/5







### **Physical Barriers/Possibilities**

- GIS Corridor Model continued (*Corridor-Design*, *Linkage Mapper*)
- Ecological corridors for carnivores lynx, bear & wolf in the Carpathians
- Main potential presence areas for low-mobility species hare, capercaillie, otter, chamois in the Carpathians & Pilot areas.









# **3-Step Approach to Ecological Corridors**

#### Habitat Suitability Model – Corridor Design

Valuation of the preferred land-cover types (0-100)

#### Breeding & population patches (core areas)

- Ecological requirements
- Suitability values >50
- Applying moving windows (>200m)

#### **Ecological Corridors – Linkage Mapper**

- Resistance values
- Least Cost Paths (LCP)
- Cost weighted distances (CWD)









## Hot Spots for lynx, bear & wolf

#### **Technical Approach**

- Intersecting the population patches = minimum distribution area
- Summing the population patches = maximal home range
- Intersection of all corridors of these three species

#### **Experience based selection**

- Most reliable corridors were selected according to ecological needs and landcover → Every partner receives a CD with the selected National Hot Spots.
- Gaps interrupting corridors are indicated as hot spots
- Partners should determine one very interesting hot spot zone for each country from the pre-selection











# **Expectation on the in depth analysis at the Hot Spots**

- Data on road mortality
- Facilities to bridge the gaps: (Green infrastructures, subways, etc.)
- Foreseen road constructions
- Current and foreseen touristic infrastructures
- Juridical issues that could become an obstacle
- Socio-economic fears to enable permeability to large carnivors
- Threats to particular stakeholders
- Expectations to benefit from extended recreation areas (welfare)
- Important input for recommendations

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# Legal Barriers – Reports from national legal experts

- Collection of international-EU material concluded
- Collection of national material almost concluded
- Reports from national legal experts
- Book Publication foreseen (recommendations)









# Legal Barriers – Reports from national legal experts

- **Hungary**: report completed and sent to partners (no comments yet)
- Serbia: report completed and sent to partners (no comments yet)
- **Slovakia**: report completed and sent to partners for comments (comments received & report approved)
- Ukraine: report completed and sent to partners for comments (pending feedback)
- Czech Republic: report draft to be integrated by Czech side (Martin Strnad)
- **Poland**: report draft on going (to be delivered by mid-end March 2013) and then to be sent to Polish partners for comments.
- **Romania**: report on going (email exchange between the legal expert and the project LP to request the latest status. The Lp confirmed that the report is ongoing.











# **Legal Barriers**

# **Book Concept:**

# **Towards Ecological Connectivity in Multi-Layered Systems**

- Protected areas and biodiversity
- Landscape
- Land use planning
- Environmental impact & strategic environmental assessment
- Agriculture and agro-environment
- Forestry
- Water
- Hunting
- Tourism



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# b) WP5 – Problems – RP4/5







# **WP-5 Problems/Delays in Physical Barriers**

#### Land-Cover

 Classified LANDSAT images (pixel data) of a 30mx30m resolution would have improved results

#### Observation data for umbrella species

 Few information data on umbrella species presence, distribution, road mortality probabilistic maps.

#### Information on physical barriers:

- Aside settlements or roads no other physical barriers were considered for determining LCP - like:
  - fenced areas, dams, over head power lines,
  - hydro-electric power plants, oil pipelines,
  - touristic infrastructures etc. are not integrated
- 5.1 is delayed due to bureaucratic problems but also
- lacks relevant information to specify ecological corridors more appropriate











## **Problems/Delays Legal Barriers**

## **Reports from national legal experts**

- Reports are finished but not commented
- The reports are not finished and thus delayed
- Czech Partner has fewer possibilities to gather the expert's view

#### Delays

- Generally the national legal experts submitted their reports in time.
- Only few requested a prolongation of the deadline and
- some reports have still not "arrived".

Legal barriers particular refer to recommendations – hence the delay evolved is currently not that problematic.











# **Problems/Delays Socio-Economic Barriers**

# Accompanied by difficulties

- Communication issues
- Online questionnaire that was only filled by 2 partners (26. Sep. 2012)

# **Solution strategy**

• At the hot spots – socio-economic issues will be stressed too.

## Delays

Compared to Legal Barriers, Socio-Economic Barriers refer more likely to recommendations – hence the evolved delay is not that problematic.









#### Preliminary activities (EURAC + PPs)

✓ Preliminary interviews with experts from Econnect

✓ Preliminary interviews with experts at the FC 2012

✓ Draft Interviews on socio – economic barriers

Selection of local experts (hot spots)

#### Analysis (EURAC)

Changes and dynamics

Secondary data on socio - economic phenomena

Draft Report including maps and quantitative information

Attitudes/behaviours

Case Studies: Socio – economic impacts at hot spots

Software to analyse qualitative interviews -

#### Validation of results (PPs+ EURAC)

Final workshop (in combination with a PP meeting)











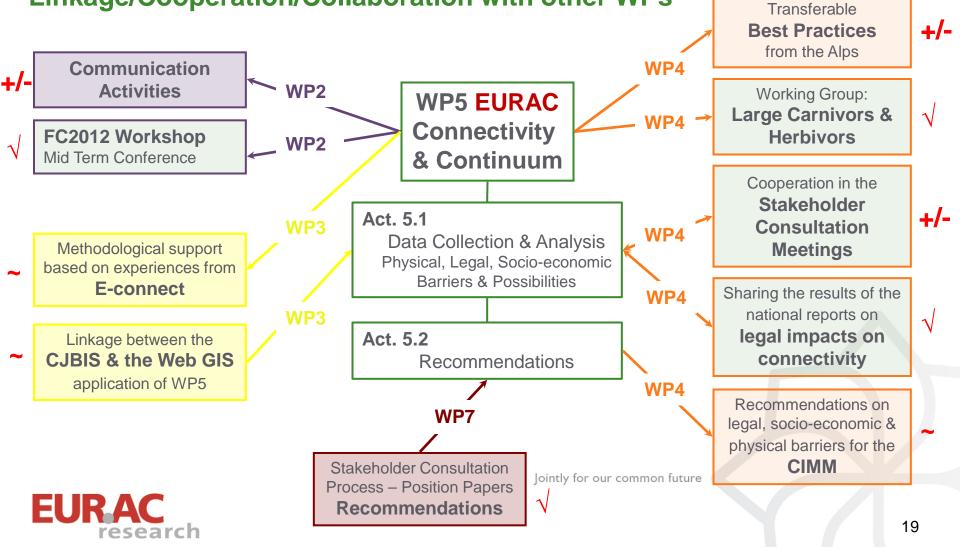
# c/d) WP5 – Linkages & Cooperation with other WPs & PPs







# Linkage/Cooperation/Collaboration with other WPs









## **Co-operation with other project partners**

PP	What	until when
PP3, PP6, PP7, PP9, PP1 (20%) PP1 (10%)	Data exchange with the pilot areas. They submitted excellent information and shp- files for PA analysis Species distribution, different protection zones Orthophotos, Romania virgin forests, CBR botany	RP4, Nov. 2012
PP4, PP10	SZIU and NFC and sent species presence data at 10X10 km UTM resolution.	RP4, Nov. 2012
LP	Lead Partner submitted shp file of habitat types in the Carpathians + touristic infrastructure facilities located close to Brasov	RP4, Nov. 2012
LP, PP10	Romania / Slovakia: Virgin forest distribution (old growth forest)	RP4, Nov. 2012
PP8	Roads present in 1990 and still in operation, + foreseen interventions in 2013. Natura 2000 sites	RP4, Nov. 2012
ALL PPs	Questionnaires (partly replied)	RP3 - RP4











# Outputs, Results & Deliverables







Output – Deliverables – Internal documents, abstracts & presentations – March 2013	Date of achievement	Status
WP5 BioREGIO Structure	Jan. 2012	$\checkmark$
Manual on advanced tools and methodologies (draft) RP4	Sept. 2012	drafted
Operational Manual for Data Collection RP1	Nov 2012	$\checkmark$
GIS application (Web GIS application in preparation) RP4	Dec 2012	$\checkmark$
National reports from legal experts on ecological connectivity RP5	Mar. 2013	partly
FC2012 Abstract (Ecological Connectivity in the Carpathians) FC2012 Presentation, Abstract (proceedings)	Dec. 2011 May 2012	$\checkmark$
IENE Berlin – Presentation and Abstract	Mar/Oct. 2012	$\checkmark$
Turkey: Presentation, Full paper as book chapter	Dec 2012 May 2013	$\checkmark$
NP Hohe Tauern Presentation, Abstract	Jan./ Jun. 2013	









οι	JTPUT - RESULTS - DELIVERABLS March 2013 – End of Project	Foreseen in AF	planned	Status		
R	Advanced tools and methodologies adopted	4 <sup>th</sup> period	5 <sup>th</sup> period	in progress		
0	Databases improved / elaborated (GIS) Metadata documentation, consistency CJBIS	4 <sup>th</sup> period	5/6 <sup>th</sup> period	in progress		
0	10 Guidelines produced (Recommendations) In coordination with WP4 and WP7	6 <sup>th</sup> period	7 <sup>th</sup> period	not started		
R	Strategies improved and developed	6 <sup>th</sup> period	7 <sup>th</sup> period	not started		
0	Report on identified barriers to ecological connectivity in the Carpathians	6 <sup>th</sup> period	7 <sup>th</sup> period	not started		
0	Project Meetings			in time		
0	Transferable Best Practices from the Alps for the report on regional development opportunities		5 <sup>th</sup> period	in progress		
R	Administrative actors reached – hot spots?	100	7 <sup>th</sup> period	in progress		
R	Individuals reached (?)	500	7 <sup>th</sup> period	achieved		











# **Outlook & Discussion**







# **Outlook & Discussion WP-5 – RP5**

#### In depth analysis – Hot Spots

- physical barriers/possibilities
- socio-economic barriers/possibilities
- Web GIS Application
- Book: Towards Ecological Connectivity in Multi-Layered Systems considering – recommendation to bridge legal barriers
- Transferable Best Practices from the Alps for the report on regional development opportunities
- Abstracts & Publications
- Coordination with WP4 and WP7
  - Mid Term Conference (CNPA Meeting)
  - Coordination of results with CJBIS (CHM)
  - Recommendations (WP4 & WP7)

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