



AGRIGRID

SSPE-CT-2006-044403

Workshop 2

Review of payment calculations in rural development measures in the EU

WP 4

Natura 2000 on agricultural and on forestry land

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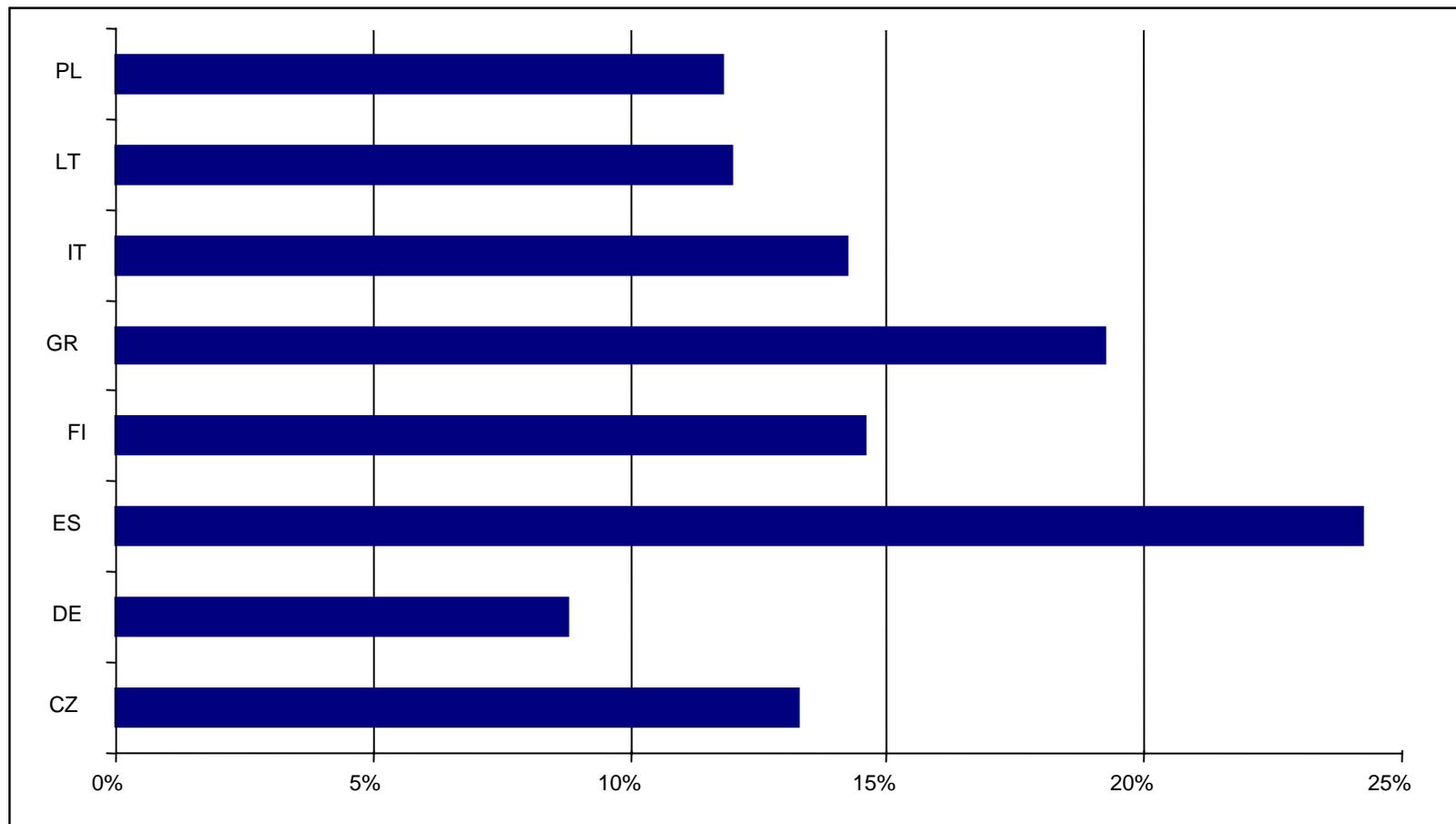
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Prague, 17 July 2007



Share of Natura 2000 area on total area



Implementation of Natura 2000 in RDPs - agricultural land

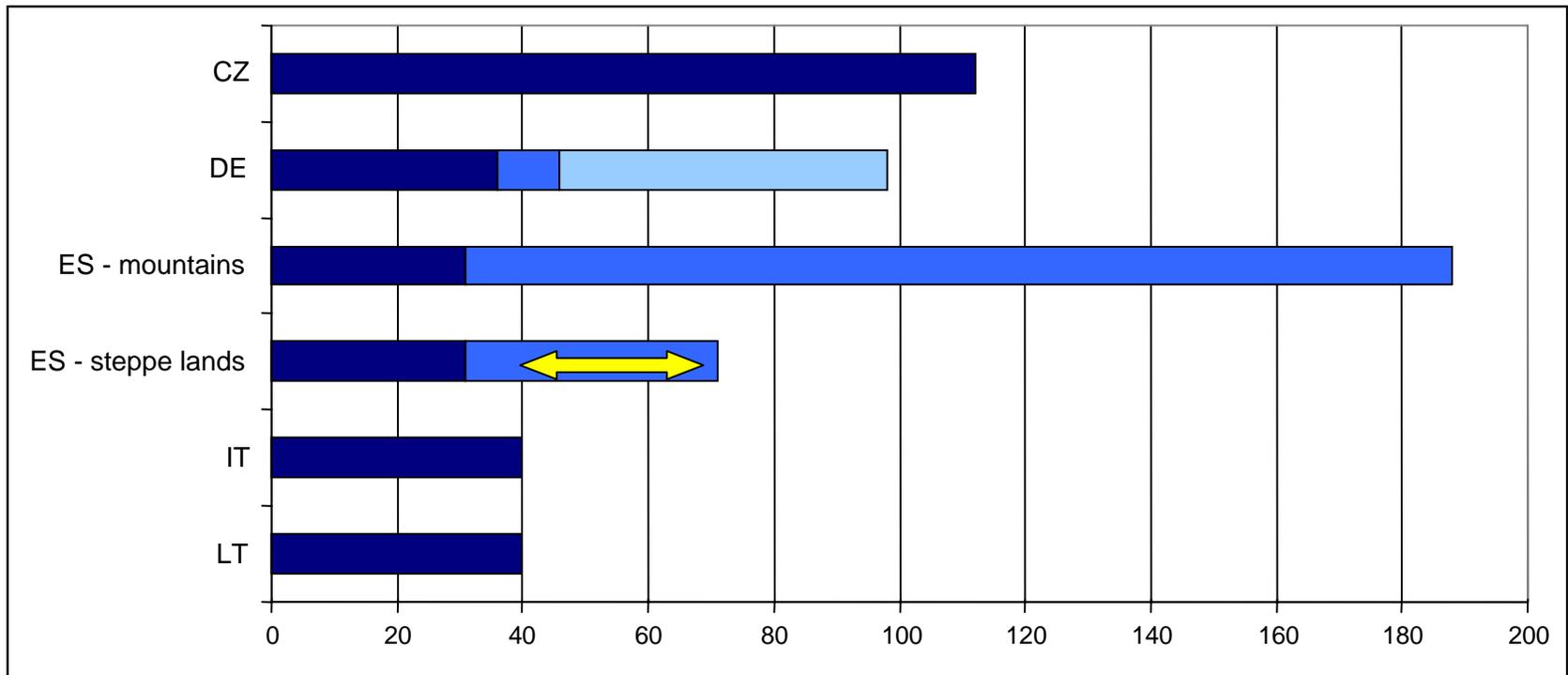
CZ	DE	ES	FI	GR	IT	LT	PL	SCO
✓	✓	✓	-	-	✓	✓	-	-

DE – North Rhine-Westphalia, ES – Navarra region, IT – Umbria region



Payment for Natura 2000 on agricultural land

- DE – differentiation according to degree of conservation obligations
- ES – Mountain areas – limit 3 000 EUR per beneficiary
- ES – Steppe lands – payment according to the number of days with prohibited grazing and the size of flock – limit 3 000 EUR per beneficiary



Implementation of Natura 2000 in RDPs - forestry land

CZ	DE	ES	FI	GR	IT	LT	PL	SCO
✓	✓	-	-	✓	✓	✓	-	-

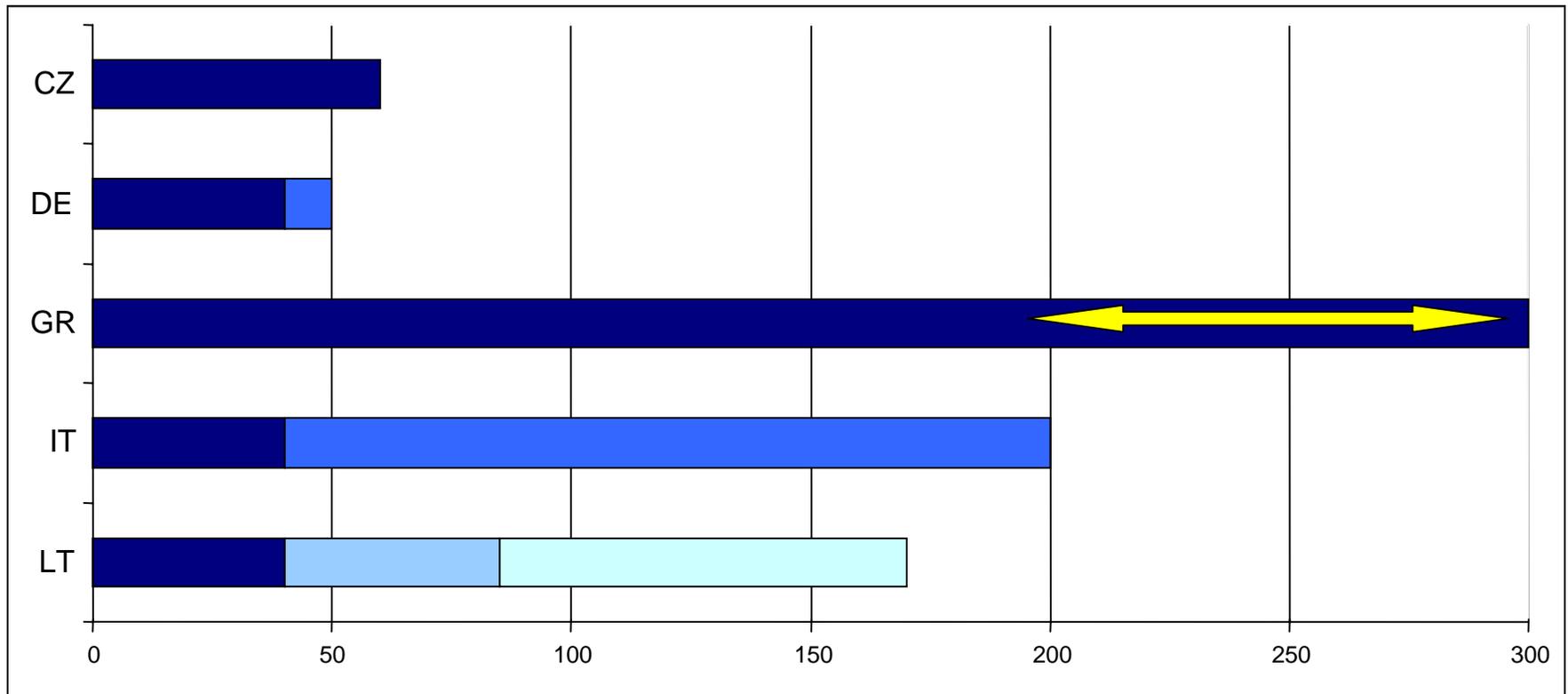
DE – North Rhine-Westphalia, ES – Navarra region, IT – Umbria region

- Natura 2000 on forestry land is a new measure in all partner countries
- Natura 2000 is implemented horizontally
- Limitation in support: in DE only deciduous trees, in CZ only fir, broadleaved trees and coppices.
- ES: forest-environmental payments,
- PL, FI: national funds



Payment for Natura 2000 on forestry land

- DE – differentiation according to degree of conservation obligations
- GR – separate calculation for each commitment undertaken
- LT – different managements, two one-off payments (144 and 59 EUR/ha)



Payment differentiations

Germany – NRW (AL + FL):

- levels of used restriction comply with the degree of designed administrative protection status of considered area

Spain – Navarra (AL)

- altitude of agricultural land (steppe and mountain grasslands)

Lithuania (FL)

- limitations in forest cutting (prohibition / postponement of final forest cutting operations, cutting of dry /dead wood or use clear cutting way)

Italy – Umbria (FL)

- particular management (exclusion from felling, prohibition of grazing)

Greece (FL)

- particular management (maintenance of mature tree cluster in coppice forests, preserve of riparian vegetation limits for logging ...)



Relevant commitments – agricultural land 1/2

CZ - prohibition of fertilization (0 kg N/ha or 30 kg N/ha in case of pastures)

DE – North Rhine-Westphalia

- restriction of ploughing up grassland, applying additional drainage methods, biotope and timber removals and afforestation
- protection of soil relief
- act with consideration of breeding birds and their nests

ES – Navarra region

A) Steppe areas:

- keep stocking limits or exclude of grazing in certain areas at certain times
- limit flock size to 700 heads in certain areas at certain times

B) Mountain areas

- adapting livestock management to pasture conditions / management plan
- preserve specific elements of nature value



Relevant commitments – agricultural land 2/2

IT – Umbria region

- prohibition of using 20% of pastures for cattle grazing in order to stop complete scrub clearing and stone removal

LT

- restriction of ploughing meadows or re-sowing them with culture grass
- restriction of draining or any other alterations of the hydrological regime
- restriction of livestock density up to 1 LU per ha
- prohibition of mowing meadows before 15 of June
- prohibition of using fertilizers, pesticides or liming substances



Basis of calculation – agricultural land

	CZ	DE	ES	FI	GR	IT	LT	PL	SCO
Income foregone									
Reduction of grass yield	✓	✓	-	-	-	-	-	-	-
Decrease of NAV	-	-	-	-	-	-	✓	-	-
Different productivities of pastures	-	-	✓	-	-	-	-	-	-
Additional costs									
Increase of feeding costs	-	-	✓	-	-	-	-	-	-
Increase of labour costs	-	-	✓	-	-	-	-	-	-
Increase of rent, management costs	-	-	-	-	-	✓	-	-	-
Transaction costs	-	-	-	-	-	✓	-	-	-



Calculation process – agricultural land 1/2

- **CZ, ES**-mountain areas: differentiation of Gross/Net margin
- **DE** - replacement costs of yield reduction
- **IT** – Umbria
 - sum of rent cost of a new pastures, operational costs (mowing, turning hay, etc.) and transaction costs covering finding parcels, drawing up contract, applying to Natura 2000 scheme and submitting to controls
- **LT** - average of differences of net added value between traditional and restricted farming (NAV is calculated for 5 different groups according to land fertility)



Calculation process – agricultural land 2/2

- **ES** – Navarra, steppe lands
 - multiple of daily feeding costs per animal and number of days when grazing is prohibited
 - multiple of daily labour cost per hectare (based on shepherd salary, typical size of herd per one shepherd and number of sheep per hectare) and number of days when the herd has to be limited under 700 units



Relevant commitments – forestry land 1/2

CZ

- undertake the commitment to conserve current forest management group

LT

- prohibition or postponement of final forest cutting operations
- prohibition of final forest cutting operations done in clear cutting way
- preservation of additional number of living trees in clear cutting areas
- Prohibition / restriction of cutting of dry trees or dead wood

DE

- maintenance of deciduous forests and of old and deadwood proportions
- prohibition/restriction of clear cutting
- removing of undesirable regeneration
- removing of premature usage of undesirable tree species
- development of typical biotopes
- renunciation of chemical synthetic pesticides
- temporal restrictions for harvesting and exploitation operations



Relevant commitments – forestry land 2/2

GR

- maintenance of mature tree cluster in coppice forests
- preserve of riparian vegetation
- limits for logging in specific zones
- prohibition of collecting of ornamental plants
- prohibition of removing of all badly shaped, overblown or fallen trees etc.

IT – Umbria region

- permanent exclusion from felling of 2 more trees per ha of every tree species making up the forest
- exclusion from felling of beech coppice-wood having reached the rotation age
- prohibition of grazing in forest located in specific habitats



Basis of calculation – forestry land

	CZ	DE	ES	FI	GR	IT	LT	PL	SCO
Income foregone									
Income losses – early/never/late cut trees	-	✓	-	-	-	✓	✓	-	-
Income losses – dry/dead trees	-		-	-	-	-	✓	-	-
Income reduction – tree composition	✓	✓	-	-	-	-	-	-	-
Additional costs									
Labour costs – removing undesirable trees	-	✓	-	-	-	-	-	-	-
Biotop development	-	✓	-	-	-	-	-	-	-



Calculation process – forestry land 1/2

- **CZ** - difference between AFI of previous and possible wood composition multiplied by rotation;
- **LT** - marketable wood volume multiplied by price of uncut wood and by annual interest rate
 - marketable wood volume of one left tree multiplied by price of uncut fuel-wood and by number of uncut dry/dead trees



Calculation process – forestry land 2/2

- **DE** - sum of additional costs (maintenance of old and deadwood proportions, biotope development and labour costs) and income foregone (maintenance of deciduous forest, clear cutting prohibition and pre-mature usage of undesirable tree species)
- **IT** - sum of income foregone (non-sale of uncut trees referring to per cent of tree canopy area and to concept of equivalent hectare) and additional costs for topographic location of trees



Identified problems and solutions

Lack of regional data, impossibility to provide calculation on smaller scales	Not solved due to high administrative costs - horizontal data (FADN) submitted by scientific literature
Quantification of yield reduction	Own survey or expert estimations, aggregated data
Lack of reliable actual technical and economic data	Normative data, expert estimations, scientific literature
Shortage of methodological experience in forestry / lack of silvicultural data in general	New evaluation methods, foreign experiences
Long-term period of the measure for forestry land	Present values adjusted by expert estimations
Imbalance in time of support and time of commitment	Not solved, paid-out is 7 years, commitment is 20 years



Used data

- **Agricultural land:**

- mostly FADN
- added by survey, expert estimation, scientific literature

- **Forestry land:**

- no common database
 - CZ – legislation for forest evaluation
 - DE – IACS, forest value evaluation guideline
 - GR – analytical list of costs for forestry work
 - LT – FADN for forests
 - IT – price lists for forestry products, value tables
- added by survey, expert estimation, scientific literature as well



Issues

- Horizontal x regional approach
 - not allow differentiation according to small scale site differences, over and underestimations in particular areas cannot be ruled out
 - more detailed differentiation of payments can increase administration costs beyond an acceptable level
- Factors as landscape and nature values are nearly impossible to be quantified and covered by payments
 - different way of calculation -paying for environmental benefit produced by farmer
- The incentive element is absent
- Discrepancies between 5-7 year payment and 20 - 25 year commitment period
- Spatial demarcation of the eligible areas – forest
 - noticeable borders need to be established
- Assessment of the usage restriction within Natura 2000 areas and amount of financial resources required
- Change of look at Natura 2000 from farmers side
 - change of idea from receiving a subsidy to producing benefits for the money
 - shift look on commitments as voluntary accept instead of restriction compensations
- Coordination between environment and agriculture authorities

