

Cases, how Slovakia will include GAEC landscape features to EFA elements



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LPIS and links between cross-compliance and EFA workshop
24th – 26th September, Brussels, Belgium

Soil Science and Conservation Institute contracted by MoA SR for Landscape features definition and relevant GIS layer creation since April 2009

- SSCRI – is responsible for LPIS creation, maintenance and update

Contract with MoA SR signed in April 2009 for creation of GAEC (layers after the "Health Check"

- landscape features
- terraces
- retention buffer strips along water courses

Selected landscape features

SSCR Institute drafts of selected LFs were consulted and modified with:

- Ministry of Agriculture SR
 - Agricultural Payment Agency SR and
- were discussed with:
- Slovak Academy of Sciences (Institute of Geography and Institute of Landscape Ecology)
 - Institutions of Ministry of Environment SR (Slovak Academy of Environment and State Nature Conservancy SR)

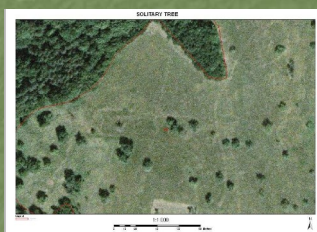
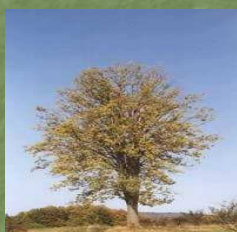
List of selected landscape features

- Point feature - solitary tree
(was digitized at first as point,
than extended on polygon with perimeter 5 metres)
- Area features (was digitized as polygons)
 - ← balk
 - ← row of trees/windbreak
 - ← group of trees
 - ← wetland

Implementation of CAEC Retention of Landscape features in Slovakia

Solitary tree

Alone growing tree (with the exception of vegetation which is the part of the balk or terrace), mostly as a part of a complex of cultivated agricultural land



Implementation of CAEC Retention of Landscape features in Slovakia

Solitary tree

Identification on orthophotomaps:

- Solitary trees are on the orthophotomap well most uniquely identifiable and interpreted and distinguishable from scrub

The current state in LPIS:

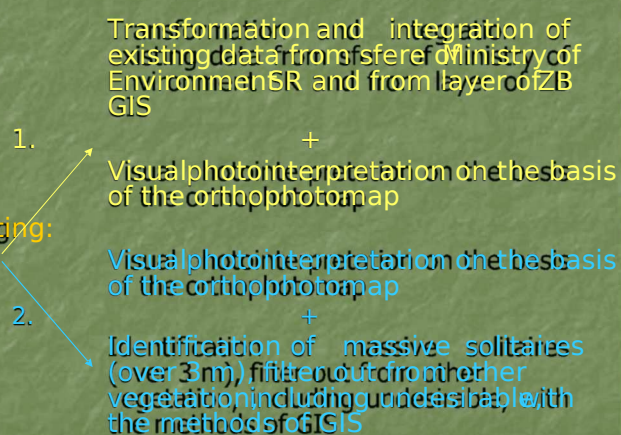
- Solitary trees weren't removed from LPIS because they didn't exceed the limit 0,05 ha (neither after subsequent checks carried out by APA where is the limit 0,01 ha), which was set as the limit for exemption from LPIS, are included in blocks of LP

Implementation of GAEC 9 Retention of Landscape features in Slovakia

Solitary tree

Process of creating:

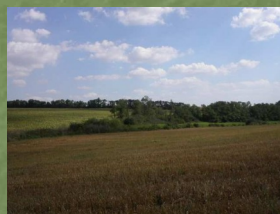
Two variants of creating:



Implementation of GAEC 9 Retention of Landscape features in Slovakia

Balk (field boundary)

Uncultivated grassy line often covered with trees or shrubs. Artificial created boundary of agricultural land, which doesn't serve the agricultural production (in particular is served to reduce the danger of water or wind erosion, generally is determined the boundary of land blocks, eventually part of land blocks, which may include woody vegetation or stone walls)



Implementation of GAECs Retention of Landscape features in Slovakia

Balk (field boundary)

Identification on orthophotomaps:

- Relatively well – identifiable and interpret on the orthophotomap, grassy strip, often with shrubs, respectively with trees on the agricultural land

The current state in LPIS:

- Small unagricultural areas, including balks, were during LPIS creation removed when were for example linear with width over 5 m. If they didn't reach this limit, they are included to the block area or are divided between blocks when they create a border

Implementation of GAECs Retention of Landscape features in Slovakia

Balk (field boundary)

Process of creating:

- Visual photo interpretation on the basis of the orthophotomap with using of LPS and topographic maps
- Marking of the area and completing the attribute table

Criteria:

- Minimum length 200 m
- Maximum area 0,2 ha

Implementation of GAEC 2 Retention of Landscape features in Slovakia

Row of trees

Row of trees, which have generally the same and regular tree spacing (with the exception of a vegetation, which is a part of the balk and terrace, as well as a vegetation, which performs the function of the forest according to § 3 of the forest law, consequently falls within the forest fund)



Implementation of GAEC 2 Retention of Landscape features in Slovakia

Row of trees

Identification on orthophotomaps:

- Row of trees is on the orthophotomap well almost uniquely identifiable and interpret and distinguishable from scrub

The current state in LPIS:

- Small agricultural areas, including row of trees, were during LPIS creation removed when were for example linear with width over 5 m. If they didn't reach this limit, they are included to the block area or are divided between blocks when they create a border

Criteria:

- Minimum length 30 m
- At least 5 trees with height over 3 m in the regular spacing

Implementation of GAEC 9 Retention of Landscape features in Slovakia

Group of trees (field wood)

They are groups of coppices of trees which have arisen spontaneously or during intentional planting on the areas of agricultural land, which isn't used for agricultural production, such as on the ex-pasture land, areas threatened by erosion and overgrazed terrain



Implementation of GAEC 9 Retention of Landscape features in Slovakia

Group of trees (field wood)

Identification on orthophotomaps:

- Group of trees is identified on the orthophotomap expressly and the drawing is clearly

The current state in LPIS:

- During the LPIS creation were internal agricultural areas, including group of trees greater than 0,05 ha (500 m²) removed from chapters.

Criteria:

- Only on the agricultural land
- minimum of 3 trees
- Maximum area of 0,2 ha

Implementation of GAEC 2 Retention of Landscape features in Slovakia

Wetland

In natural conditions are considered as wetlands all habitats, whose existence is subjected to permanent presence of water. Among wetlands belong all natural or artificial origin areas, where the water levels on the surface or when shallow water covers the surface



Implementation of GAEC 2 Retention of Landscape features in Slovakia

Wetland

Identification on orthophotomaps:

- Is ambiguous, often complicated, using other spatial informations are identifiable

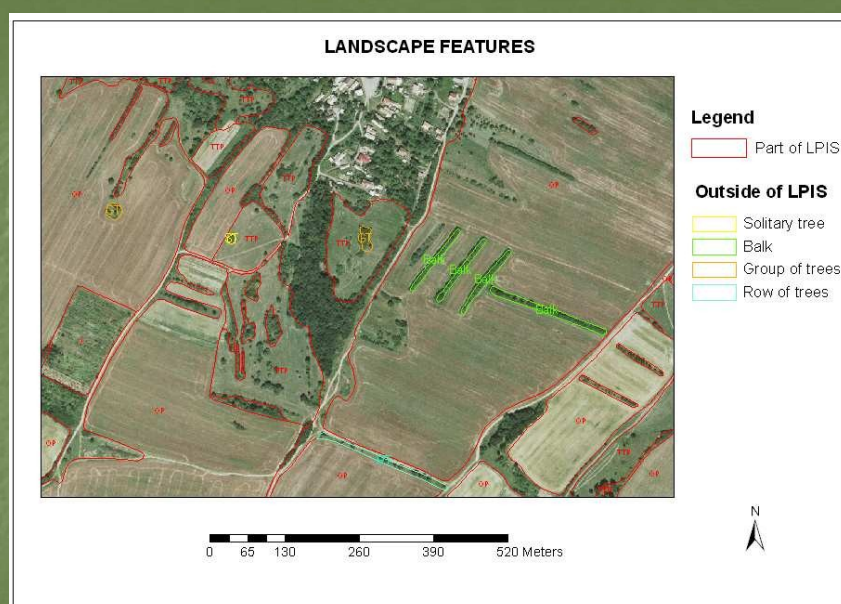
The current state in LPIS:

- During LPIS creation were internal unagricultural areas, including wetlands (this isn't valid often, sometimes wasn't wetland photointerpret as the wetland, but as grassland) bigger as 0,05 ha (500 m²) removed from the parcel area when was interpreted as disconvenable for difficulty photo interpretation part of wetlands include to the LPIS, the case of KNM review were removed also areas over 100 m².

Criteria:

Maximum area of 0,2 ha

Implementation of GAEC 2 Retention of Landscape features in Slovakia



Implementation of GAEC 2 Retention of Landscape features in Slovakia

Statistics of landscape features 2014

Total number of landscape features protected by the GAEC in Slovakia - 24

Solitary tree 38750
Balk - 8165
Row of trees 44526
Group of trees 11616
Wetland - 12214

Total area of landscape features protected by the GAEC in Slovakia 3 884

Solitary tree 1717 ha
Balk - 2041 ha
Row of trees 11641 ha
Group of trees 10100 ha
Wetland - 85 ha

Implementation of GAEC Retention of Landscape features in Slovakia

Updating of landscape features

Updating of the digital layer of protected landscape features have been made on the basis of:

current orthoimagery flown in 2011 and 2012,
the measurements results from the controls on-the-spot
carried out by employees of Agricultural Agency,
subsidy controls by method of remote sensing,
suggestions of farmers.

Implementation of GAEC Retention of Landscape features in Slovakia

Updating of landscape features

Changes have been made in the layer of landscape features:

- deletion of landscape features from the database landscape features,
- creating of a new landscape features,
- decreasing of the area of landscape features,
- increasing of the area of landscape features,
- division of landscape features,
- merging of landscape features,
- changes of the attributes of landscape features.

Implementation of GAEC Retention of Landscape features in Slovakia

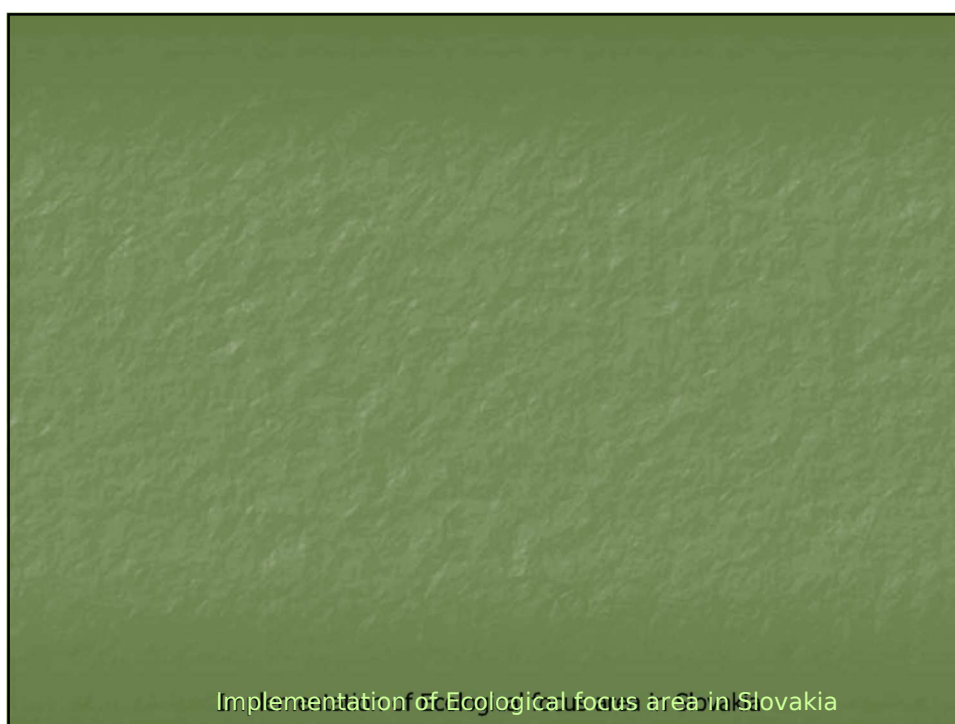
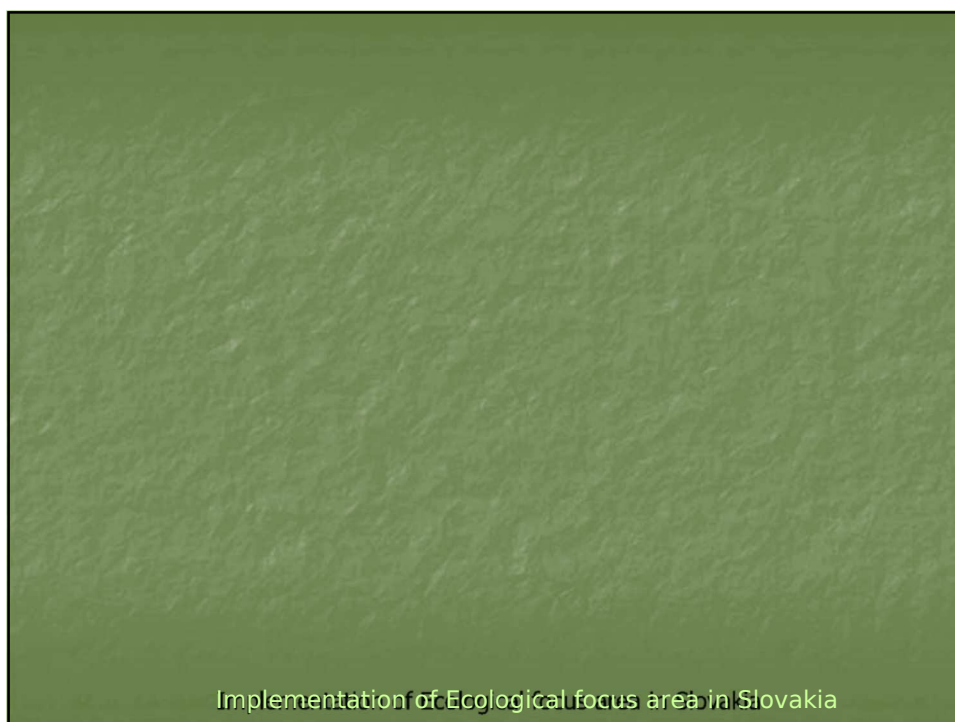
ECOLOGICAL FOCUS AREA

It is necessary to establish ecological focus area, particular to protect and to improve biodiversity on farms under the Single Area Payment Scheme (SAPS).

List of EFA under Regulation:

- Fallows,
- Terraces,
- Green cover,
- Catch crops,
- Nitrogen fixing crop,
- Agro-forestry,
- Afforested areas,
- Short rotation coppice,
- Buffer strips,
- Strips along forest edges,
- Landscape features.

Implementation of Ecological focus area in Slovakia



Comparison of the definition of landscape features according to the DA and the current definition of GAECs in Slovakia

Solitary tree

Definition according to the DA

Crown diameter of minimum 4 meters.

Member States may include trees recognised by themselves as valuable landscape features with a crown diameter below 4 meters.

Downloading of all Solitary trees defined as GAEC in Slovakia to layer defined according DA

Current definition of GAEC in Slovakia

Crown diameter of minimum 5 meters.

Implementation of Ecological focus area in Slovakia

BALK

Definition according to the DA

Width between 1 and 20 meters (on which there shall be no agricultural production).

Member States may establish a lower maximum width.

Downloading of all Balk defined as GAEC in Slovakia to layer defined according DA

Current definition of GAEC in Slovakia

Minimum length – 20 m.

Maximum width of generally up to 15 m.

Maximum area – 2 ha.

Implementation of Ecological focus area in Slovakia

Row of trees

Definition according to the DA

Crown diameter of minimum 4 meters. The space between the crowns shall not exceed 5 meters.

Member States may include trees recognised by themselves as valuable landscape features with a crown diameter below 4 meters

Current definition of GAEC in Slovakia

Minimum length 30 meters.

At least 5 trees with high over 3 meters in the regular spacing.

Width is less than 4 meters. space between crowns is undefined.

Maximum width of generally up to 30 metres.

Implementation of Ecological focus area in Slovakia

Row of trees

Checking, that all the Row of trees defined as GAEC in Slovakia, meet the conditions prescribed under the DA

Basis – existing layer of landscape features protected under GAEC

Row of trees (defined by GAEC) to be included among the EFA must meet following:

“crown diameter of minimum 4 meters, the space between the crowns shall not exceed 5 meters, if the Row of trees overlaps with the layer, historical structure of agricultural land”

When Row of trees (defined by GAEC) meets the above conditions, it is included in the layer EFA

Implementation of Ecological focus area in Slovakia

Group of trees

Definition according to the DA

Maximum area 0,3,3.

Current definition of GAEC in Slovak

Maximum area 0,2 ha.

Formed at least 3 trees.

Downloading of all Group of trees
defined as GAEC in Slovakia to
layer defined according DA

Implementation of Ecological focus area in Slovakia

Wetland

Definition according to the DA

NOT DEFINED

Current definition of GAEC in Slovak

■ Maximum area 2,2 ha.

Implementation of Ecological focus area in Slovakia

Landscape features

Definition according to the DA Current definition of GAE in Slovakia

FORMING ONE digital GIS LAYER

Existing layer of Landscape features defined according to the GAE
Attribute will defined which landscape features fall within the
definition according to the DA.

Implementation of Ecological focus area in Slovakia

Implementation of Ecological focus area in Slovakia