



BULGARIA

MINISTRY OF AGRICULTURE AND FOOD

General Directorate “Agriculture”

**Maintenance and progress of
Land Parcels Identification System
(LPIS)**

Sofia, 17-18 September 2008

PROGRESS OF LPIS

FULL COVERAGE OF BULGARIA WITH PHYSICAL BLOCKS

- ④ This activity was fulfilled by the MAF during the period September 2007 – February 2008
- ④ On 12 February 2008 the new database “Physical blocks” was submitted to the PA
- ④ On 10 September the database “Physical blocks” updated according to the results of the field checks during the period Mart – August was submitted to the PA

February 2008

September 2008

LAND USE	Number PB	Area (ha)	Number PB	Area (ha)
Physical blocks - agricultural land				
1. Arable land	140 767	3 246 689	139 900	3 213 607
2. Permanent Cultures	19 066	169 951	20 277	172 559
3. Family gardens	126 679	301 180	127 110	302 233
4. Permanent pastures (pastures, meadows and other)	206 953	1 344 300	208 379	1 351 388
5. Mixed Usage	62 581	549 417	65 306	588 286
total:	556 046	5 611 537	560 972	5 628 072
Physical blocks – non agricultural land	431 113	5 487 862	434 507	5 471 371
Other Physical blocks	111	243	86	199
TOTAL:	987 270	11 099 642	995 479	11 099 642



PROGRESS OF LPIS **FULL COVERAGE OF BULGARIA** **WITH PHYSICAL BLOCKS**

LAND USE	MAIN LAND USE	DETAILED LAND USE
Agricultural land	1. Arable land	
	2. Permanent Cultures	2.1. Vineyard
		2.2. Fruit orchard
		2.3. Other permanent cultures
	3. Family gardens	3.1. Farmyard
		3.2. Round settlement areas
	4. Permanent pastures (pastures, meadows and other)	4.1. Natural pastures and meadows
		4.2. Pastures and meadows in arable land
		4.3. Forest pastures and meadows
	5. Mixed Usage	



PROGRESS OF LPIS **FULL COVERAGE OF BULGARIA** **WITH PHYSICAL BLOCKS**

LAND USE	MAIN LAND USE	DETAILED LAND USE
Non agricultural land	11. Unadapted for tilling land	11.1. Bushes and grassed land 11.2. Gully 11.3. Field roads, tracks and rides
	12. Forest territories	
	13. Urban areas	13.1. Town structures 13.2. Urban areas outside settlement 13.3. Zone for sports and recreation
	14. Water surface and wetland	
	15. Damaged land	15.1. Quarry, pit and spoil 15.2. Dung-hills and other
	16. Transport territories	
	17. Bare and erosion territories	
	18. Other territories	
	19. Areas with other, non agricultural function	
Unspecified areas		



PROGRESS OF LPIS

FULL COVERAGE OF BULGARIA WITH PHYSICAL BLOCKS

STRUSTURE OF THE PHYSICAL BLOCKS DATA



Physical Block

1. ID - UNIQUE CODE (georeferenced)
2. CODE OF LAND USE
3. FLAG “Valuation of eligibility”
4. Date of field inspection (if presence)
5. Other, specific attributes

Example 1:

1. ID = 22 435 – 49 (22 435 – Settlement-Code;
49 - № Physical block in this Settlement)
2. CODE OF LAND USE = 12 (Forest)
3. FLAG “Valuation of eligibility” = empty
4. Date of field inspection = empty
5. Other, specific attributes = empty

Example 2:

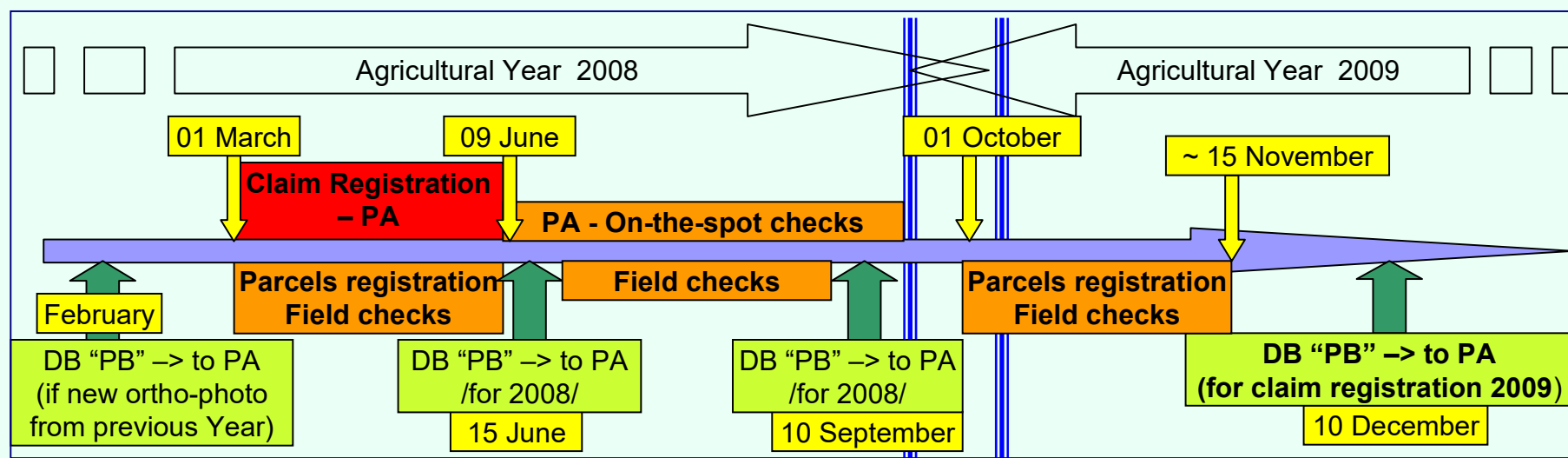
1. ID = 22 435 – 47 (22 435 – Settlement-Code;
47 - № Physical block in this Settlement)
2. CODE OF LAND USE = 2.1 (Vineyard)
3. FLAG “Valuation of eligibility” = 3
4. Date of field inspection = 17.07.2008
5. Other, specific attributes = “Wine Vineyard”

PROGRESS OF LPIS

STRATEGY FOR MAINTENANCE OF THE PHYSICAL BLOCKS IN LPIS IN ACTUAL STATE (2008 – 2011)

The approved strategy is based on and includes following elements:

- Field inspections of the physical blocks and entering the conclusions from the field checks in LPIS
- Using GPS- devices and photo cameras during the field checks
- Digital ortho-photo map update for whole territory of the country to 2011





PROGRESS OF LPIS

Strategy for maintenance of the physical blocks in LPIS in actual state (2008 – 2011)

1. Field inspections of the physical blocks and entering the conclusions from the field checks in LPIS

It is envisaged that the field checks of the physical blocks for maintenance of LPIS in current state to be performed 3 times per year as each of these “campaigns” have the following features:

In the period 01 March – 23 May – This field checks are already done

Mainly registered physical blocks are under examination; as liable to obligatory checks are:

- ③ Physical blocks which borders are crossing with registered or re-registered farmers block;
- ③ Physical blocks – nonagricultural areas which include registered farmers block;
- ③ Physical blocks – abandoned agricultural land (notwithstanding of their land use, but with share of ineligible areas > 75 % - FLAG “Valuation of eligibility” = 5)

By this means at the end of campaign for submission of the applications for area payment in the regional offices of PA will inspect the physical blocks for which changes in the borders are possible to be made and the changes concern registered areas.

Data from these field inspections will be entered in LPIS/GIS and will be submitted to SFA - Paying agency every year by 15 of June.

During the period 15-30 of June, a complex analysis on the data for the registered eligible areas for previous campaigns will be made, mainly by comparison of the land use in the declared farmer's blocks and the land use of the physical blocks. After that the physical blocks registered in LPIS as agricultural lands, in which there is no farmers blocks which are utilized /cultivated, will be set apart. In this period the physical blocks – agricultural lands, which are really a utilized arable area, will be identified, as a complete assessment of the eligible for support agricultural areas (arable lands, permanent crops, pastures, common pastures and meadows, kitchen gardens) will be made as well.



PROGRESS OF LPIS

Strategy for maintenance of the physical blocks in LPIS in actual state (2008 – 2011)

1. Field inspections of the physical blocks and entering the conclusions from the field checks in LPIS

It is envisaged that the field checks of the physical blocks for maintenance of LPIS in current state to be performed 3 times per year as each of these “campaigns” have the following features:

In the period 01 March – 23 May – This field checks are already done

In the period 1 July – 30 August

Mainly physical blocks with registrations in them will be checked, and the greatest attention shall be given to:

- Physical blocks – agricultural areas with a large percentage of abandoned land (notwithstanding of their land use, but with share of non eligible areas > 50 % - FLAG “Valuation of eligibility” = 4),
- Physical blocks – pastures, common pastures, and grasslands.

The data from those field checks will be introduced into the LPIS/GIS and shall be made available to the SF “Agriculture” – the Paying Agency every year by 10 September.

In the period 1 October – 30 November

Other physical blocks will be checked. **This Year that are Physical blocks “Wine Vineyard”.**

The data from those field checks will be introduced into the LPIS/GIS and shall be made available to the SF “Agriculture” – the Paying Agency by the end of every year.



PROGRESS OF LPIS

Strategy for maintenance of the physical blocks in LPIS in actual state (2008 – 2011)

2. Using GPS- devices and photo cameras during the field checks

The tender is already started and will finish to the end of September.

After Municipality Offices “Agriculture” and Regional Offices “Agriculture” are being equipped with GPS-devices, during the field checks there will be measured borders of: :

Physical Blocks (PBs), if:

- ③ Doubt concerning their correct borders;
- ③ They have registration of Farmers block, which are in deed cultivated/used and which are outside PBs blocks – nonagricultural areas which include registered farmers block;

Farmers block, if the farmers block is registered in :

- ③ PBs – agricultural land, which has a value of FLAG “Valuation of eligibility” = 5 /a percentage of ineligible land between 75-100 % / for more correct determination of that percentage;
- ③ PBs;- nonagricultural land, with land use “Forests” or “Bushes and grassed areas” or other for separation, if possible, of these claimed parcels, which are in deed cultivated/used as new PBs – agricultural land;
- ③ PBs;- nonagricultural land with another land use, if it’s possible there to be used agricultural parcels, for separation, if possible, of these claimed parcels, which are in deed cultivated/used as new PBs – agricultural land

After Municipality Offices “Agriculture” and Regional Offices “Agriculture” are being equipped with digital cameras, during the checks in the fields there will be made obligatory photo images of the status of the checked PBs and the registered in them parcels, when they don’t meet the terms for support. For these reasons in the Terms of Reference for buying GPS-devices is envisaged to be offered also “Digital Color Camera with 1.0 Mega pixels”.



PROGRESS OF LPIS

Strategy for maintenance of the physical blocks in LPIS in actual state (2008 – 2011)

3. Digital ortho-photo map update for whole territory of the country to 2011

The tender is already approved and will start to the end of September.

According to planned schedule for actualization of the digital ortho-photo map, yearly must be covered:

③ 2009 - 40 % (of the whole territory) ; 2010 – 40 % ; 2011 – 20 %

This planned schedule can be corrected if necessary.

During update of the digital ortho-photo map for a part of the territory, a process of updating the coverage of that territory with physical blocks will be completed.

The process comprise the following stages:

- ③ Checkup according to the new ortho-photo map of the existing physical blocks compliance with the status of the land surface after the new image is taken and analysis of change;
- ③ Correction of the physical blocks where a need of such a correction is registered (of borders, a manner of durable use, a need of exclusion of ineligible areas, or a change or elimination of excluded areas, or a change of the stage of legitimacy of the physical block area);
- ③ Dividing or unification of physical blocks;
- ③ Creating of new physical blocks.

It is provided that the update of data base “Physical blocks” according to the updated digital ortho-photo map must be done by the end of every year.

For those physical blocks, whose manner of durable use or borders cannot be explicitly determined, even with the use of the already existing coverage with PBs, the corresponding field checks will be performed in the period 1 October – 30 November. The updated data base “Physical blocks”, including the registered data from those field checks, will be provided to State Fund “Agriculture” – Paying Agency till the end of every year.

The updated digital ortho-photo map will enable the Technical inspectorate of the Paying Agency, with using the methods of remote sensing control, to ensure the conduction of the increased number of obligatory checks.



PROGRESS OF LPIS

Data about Farmer blocks, registered in LPIS for 2007/2008

- ④ **Farmers served – 88 454**
- ④ **Farmers registered – 84 520**

Registered land use of farmer blocks	Number FB	Area (ha)
1. Arable land	430 697	2 939 883
2. Permanent Cultures	66 987	88 103
3. Family gardens	4 502	1 400
4. Permanent pastures (pastures, meadows and other)	211 891	540 597
5. Mixed Usage	15 120	27 503
6. Other agricultural land	38	72
Non agricultural land use	238	3 494
Total:	729 543	3 601 053



PROGRESS OF LPIS

FIELD INSPECTIONS OF THE PHYSICAL BLOCKS

triggered from registration of farmers block

In the period 01 March – 30 August 2008

- ④ **Number of inspected Physical blocks – 68 687 (6.90 % from all), with area = 1 375 899 ha (12.40 % from whole territory)**
- ④ **Number of inspected Farmers blocks by these field checks – 102 214, with area = 426 433 ha**
- ④ **Number of Physical blocks for changes in Data Base – 49 872, with area = 833 963 ha**

Changes in DB “PB” (by ascertainment from field inspection)	Number	% from all PB – agricultural land	Area (ha)	% from all PB – agricultural land
Ⓒ Borders	12 535 (6 268)	2.23 % (1.11 %)	178 988	3.18 %
Ⓒ Land use	14 574	2.60 %	204 820	3.64 %
Ⓒ Flag “% ineligible land”	25 121	4.48 %	403 939	7.18 %
Ⓒ New generated PB	5 769	1.03 %	44 637	0.79 %
TOTAL	38 604	6.88 %	596 924	10.61 %

PROGRESS OF LPIS

Comparison between LPIS Data Base “Physical blocks” – agricultural land from 2007 (September) and 2008 (September)

	2007	2007	2008	2008	разлика
Physical blocks - agricultural land	Брой ФБ	Площ (ха)	Брой ФБ	Площ (ха)	Площ (ха)
1. Arable land: 0 - 75 % ineligible land	122 658	3 040 780	128 204	3 114 370	+ 73 590
75 – 100 % ineligible land			11 696	99 237	
2. Permanent Cultures: 0 - 75 % ineligible land	16 593	144 841	18 732	154 752	+ 9 911
75 – 100 % ineligible land			1 545	17 806	
3. Family gardens: 0 - 75 % ineligible land	83 973	343 209	127 110	302 233	- 40 976
75 – 100 % ineligible land			0	0	
4. Permanent grass areas: 0 - 75 % ineligible land	192 445	1 247 339	205 789	1 334 321	+ 86 982
75 – 100 % ineligible land			2 590	17 068	
5. Mixed Usage: 0 - 75 % ineligible land	64 599	594 187	65 225	587 286	- 6 901
75 – 100 % ineligible land			81	1 000	
total:	480 268	5 370 356	545 060	5 492 961	+ 122 605
6. Other agricultural land (75 – 100 % ineligible land)	49 640	389 659	15 912	135 112	- 254 547
TOTAL:	529 908	5 760 015	560 972	5 628 072	- 131 943

PROGRESS OF LPIS

**Comparison between LPIS Data Base “Physical blocks”
from September 2007 and September 2008
(Physical blocks with registration for SAPS)**

	Registration 2007	2007	Registration 2008	2008	Difference
Physical blocks - agricultural land	Number PB	Area (ha)	Number PB	Area (ha)	Area (ha)
1. Arable land: 0 - 75 % ineligible land	98 124	2 953 196	104 464	3 034 784	+ 81 588
75 – 100 % ineligible land			726	13 121	
2. Permanent Cultures: 0 - 75 % ineligible land	10 412	114 955	11 818	120 964	+ 6 009
75 – 100 % ineligible land			161	2 483	
3. Family gardens: 0 - 75 % ineligible land	9 703	67 617	11 965	48 524	- 19 093
75 – 100 % ineligible land			0	0	
4. Permanent pastures: 0 - 75 % ineligible land	57 285	647 313	70 851	785 137	+ 137 824
75 – 100 % ineligible land			179	3 057	
5. Mixed Usage: 0 - 75 % ineligible land	38 401	481 977	41 235	490 547	+ 8 570
75 – 100 % ineligible land			26	364	
total:	213 925	4 265 058	240 333	4 479 958	+ 214 900
6. Other agricultural land (75 – 100 % ineligible land)	8 585	139 957	1 092	19 025	- 120 932
TOTAL:	222 510	4 405 015	241 425	4 498 982	+ 93 967

PROGRESS OF LPIS

Observation of the rule 75/90 % (R796/2004)

Physical blocks - agricultural land with registration	Total number	Total area	Number of FB, with ≥ 90% eligible land	Area of FB, with ≥ 90% eligible land	% Number (column 3 to column 1)	% Area (column 4 to column 2)
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1. Arable land:	105 190	3 047 905	87 429	2 682 651	83.11 %	88.02 %
2. Permanent Cultures:	11 979	123 447	9 300	86 221	77.64 %	69.84 %
3. Family gardens:	11 965	48 524	0	0	0.00 %	0.00 %
4. Permanent pastures:	71 030	788 194	48 233	481 330	67.91 %	61.07 %
5. Mixed Usage:	41 261	490 911	23 711	267 028	57.47 %	54.39 %
TOTAL	241 425	4 498 982	168 673	3 517 230	69.58 %	78.18 %
TOTAL without Family garden	229 460	4 450 458	168 673	3 517 230	73.51 %	79.03 %

Physical blocks – Family gardens are in revision (building and other urban structures are excluded from the blocks).



PROGRESS OF LPIS

Integration in LPIS the data for Less Favor Areas

This work is done. In LPIS now exist polygons (borders) for all adopted Less Favor Areas.
All physical blocks – agricultural land, included in LFA, are determinately.

Integration in LPIS the data, necessary for schemes and measures under the Rural Development Program, other than SAPS

This work is done as part of creation of full coverage from Bulgaria with physical blocks.
The Land Use of each physical block in LPIS and any additional information reference the farmer to determinate for purposes of which schemes is the area of this physical block allowed.

Integration in LPIS the data from NATURA 2000

This work is in progress.
In LPIS now exist polygons (borders) for 15 adopted NATURA 2000 areas.
Each new area NATURA 2000 will be included in LPIS immediately after their adoption.

Integration in LPIS the data from LUCAS

This work is in progress.
In LPIS now exist 9 000 LUCAS-Point.
The data from observation in this point must be included in LPIS to end of November 2008.

Integration in LPIS the data from the “Vineyard register”

This work is in progress, including field checks.
In LPIS now exist 5 008 Physical blocks “Vineyard”, with total area from 49 937 ha.
The work must be done to end of November 2008, inclusive field checks and changes in DB “PB” according their results.



Thank you for your attention!