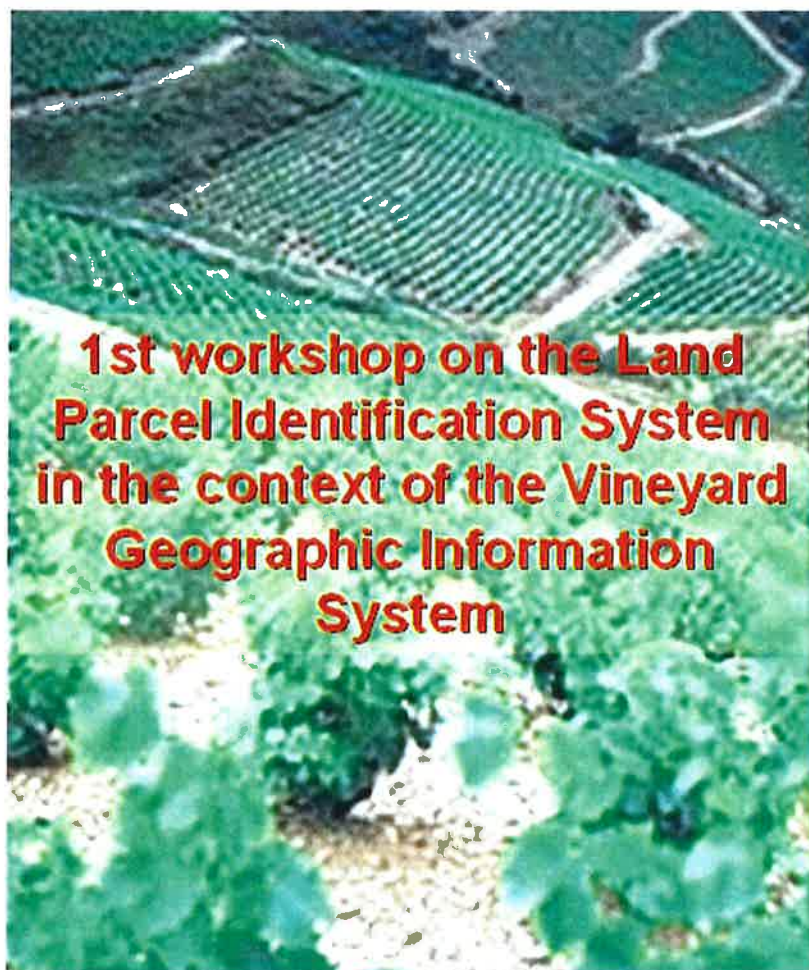




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JOINT RESEARCH CENTRE - ISPRA
Institute for Protection and Security of the Citizen
MARS Unit

ISPRA, 6 and 7 November 2002



Proceedings

<p>Prepared by: Josiane Masson</p> <p>Approved by: Olivier Léo, Jacques Delincé</p>	<p>Status: Unrestricted</p> <p>Diffusion: Internal JRC, Mars Unit DG AGRI: Hans Barth, Sterghios Tatayas, Jean-Pierre Poncelet, J. Stakenborg, Maurizio Chiappone National Administrations (participants to the workshop)</p>
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Dear Participants,

Upon the request of many people who attended the workshop on Vineyard Register in November 2002, the MARS Unit decided to edit those proceedings. You will find some abstracts, Powerpoint presentations print out and summaries of presentations.

We would like to thank you very much for your participation. A special thank as well to the speakers from Member States and Candidate Countries for the high quality of their presentation. This exchange of experience between national administrations and the Commission was very fruitful.

For the first time the MARS Unit (Monitoring Agriculture with remote Sensing) of the IPSC, JRC (Joint Research Centre of the European Commission) organised a workshop on Vineyard Register. All the wine-growing Member States (at least those covered by the Vineyard Register obligation: Austria, France, Germany, Greece, Italy, Luxembourg, Portugal, Spain, UK) and Candidate Countries (Bulgaria, Czech Republic, Cyprus, Hungary, Malta, Romania, Slovak Republic, Slovenia) were represented at this workshop. A total of 62 participants attended this workshop, of which 23 from European Union and 14 from Candidate Countries.

This workshop gave us a good overview of the status of Vineyard Register in the UE and in the CCs. To the crucial question '*are the national administration prepared to meet the compatibility requirement between IACS and Vineyard Register?*', the answer is 'yes' in most of cases. Despite the lack of legal obligation, 7 of the 9 wine-growing Member States (i.e. except from UK and France) and all the wine-producer CCs have already implemented a Vineyard GIS (Geographic Information System), or plan to do it in a short-term period. Some countries already went further, by implementing an integrated 'multi-sector' GIS (Italy, Luxemburg...) or a Vineyard GIS in synergy with IACS. Despite the fact that Vineyard Register is very often based on cadastre, many countries use or will use 25cm or 50 cm ortho-photography. The Candidate Countries are not behind in spite of the fact that it was not always an easy task to put existing legislation at the level of UE regulation. De facto they have to implement a simplified Vineyard Register; some of them showed already very good examples of GIS-based applications.

This workshop was an opportunity to establish contacts with National Administration. The JRC plans to maintain and reinforce this network on Vineyard Register, with links to other MARS activities on Common Agricultural Policy.

Yours faithfully,

Jacques Delincé, MARS Unit Head



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**1st workshop on the Land Parcel Identification System in the context of the
Vineyard Geographic Information System**



Joint Research Centre, Ispra (Lago Maggiore), Italy

6 – 7 November 2002

Final Agenda

Wednesday 6 November

Session 1 Context and requirements – IACS and Vineyard registers

Chairman: Olivier Léo, MARS Unit, JRC

- | | |
|---------------|--|
| 9:00 – 9:10 | Welcome and introduction
<i>Jacques Delincé, Unit Head of MARS Unit (IPSC, JRC Ispra)</i> |
| 9:10 – 9:30 | DG AGRI point of view
<i>Hans Barth, DG AGRI Audit of Agricultural expenditure</i> |
| 9:30 – 10:10 | Historical context and objectives of the vineyard register
<i>Olivier Léo & Josiane Masson, MARS Unit (IPSC, JRC Ispra)</i> |
| 10:10 – 10:45 | Requirements for compatibility between IACS and Vineyard register
<i>Simon Kay, MARS Unit (IPSC, JRC Ispra)</i> |
| 10:45 – 11:00 | <i>Coffee break</i> |



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Session 2	Presentation of the vineyard registers by Member State
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Chairman: Josiane Masson, MARS Unit, JRC

- 11:00 – 11:30 Presentation of the vineyard register in France
Patrick Grondin, Ministry of Finance, DG DDI – F3 and Ludovic Pâris, ONIVINS
- 11:30 – 12:00 Presentation of the vineyard register in Spain with the existing graphic database and integration with LPIS and olive GIS
D. Jose Manuel Alvarez, Servicio del Registro Viticola, MAPA
- 12:00 – 12:30 Presentation of the vineyard register in Italy: implementation of the vineyard GIS and links with LPIS
Maurizio Piomponi, AGEA
- 12:30 – 14:00 *Lunch*
- 14 :00 – 14:30 Presentation of the vineyard register in Germany
Volker Steimetz, Staatliches Weinbauinstitut, Länder of Baden-Württemberg
- 14:30 – 15:00 Presentation of the vineyard register in Portugal and integration of the vineyard register with the SIP
Carlos de MELO, Instituto da Vinha et do Vinho
- 15:00 – 15:30 Presentation of the vineyard register in Austria: particularities of the regionalisation
Christian Jaborek, Leiter der Abteilung III/8 - Wein im BMLFUW Bundesministerium für Land- und Fortswirtschaft & Stefan Horvath, region of Burgenland
- 15:30 – 15:45 *Coffee break*
- 15:45 – 16:15 Presentation of the joint implementation of Vineyard and Olive GIS in Greece
M. Panagiotopoulos, Ministry of Agriculture



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16:15 – 16:45 Presentation of the Vineyard Register in Luxembourg

Jeannot BONIFAS, Institut Vini-viticole

16:45 – 17:00 Presentation of the Vineyard register in the UK

John Boodle, Wine Standard Board

Session 3	Round Table on the consistency between IACS and Vineyard registers
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17:00 – 17:45 *Chairman: Simon Kay*

18:00 *Drink*

19:30 *Transport by bus to the hotel*

Thursday 7 November

Session 4	Vineyard register implementation in the Candidate Countries
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Chairman: Els de Roeck, MARS Unit

9:00 – 12:30 Presentations by candidate countries

9:00 – 9:30 Implementation of vineyard register in Hungary

Zoltán Harcz, Ministry of Agriculture and Rural Development & László

Martinovitch, FÖMI Remote Sensing Center

9:30 – 10:00 On-going project of vineyard register in Bulgaria

Evdokiya Krasteva, Executive agency for Vineyard and Wine & Ted Huberts,

ILIS b.v

10:00 – 10:30 Implementation of vineyard register in the Czech

Republic

Monika Brozova & Jaroslava Spalkova, Ministry of Agriculture



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10:30 – 11:00 Project of Vineyard register in the Slovak Republic
Zuzana Vybohova, Ministry of Agriculture

11:00 – 11:30 Project on Vineyard register in Slovenia
Mojca Jaksa, MAFF, Slovenia

11:30 – 11:50 Project on Vineyard register in Romania
Mircea Petrescu, Ministry of Agriculture, Food and Forestry, Romania

11:50 – 12:10 Project on Vineyard register in Malta
Randall Caruana, Viticulture and Oenology Unit, Ministry of Agriculture and Fisheries, Malta

12:10 – 12:30 Project on Vineyard register in Cyprus
Xyriacos Alexandrou, Department of Agriculture

12:45 – 14:00 *Lunch*

Session 5	Future of activities on Vineyard GIS
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Chairman: Jacques Delincé, MARS Unit

14:00 – 14:20 Strategy for the future on vineyard registers
Jacques Delincé, MARS Unit (IPSC, JRC Ispra)

14:20 – 14:40 Point of view of the JRC on future activities
Olivier Léo & Josiane Masson, MARS Unit (IPSC, JRC Ispra)

14:40 – 15:00 Round table on technical issues (GIS implementation, use of orthophotos...)

15:00 – 16:00 Demonstration of the Intranet/Internet application developed for the management of Wine register in Spain
David Plaza Plaza, INYPSA

16:00 End



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List of participants



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Introduction

This 1st workshop on Vineyard Register was organized by the MARS Unit (Monitoring Agriculture with remote Sensing) of the IPSC, JRC (Joint Research Centre of the European Commission) in Ispra on 6-7 November 2002. The purpose of the workshop was to overview the status of Vineyard Register in the Member States and to acknowledge the situation in the Candidate Countries, highlighting countries which have already or will implement a GIS-based Vineyard Register. The purpose of this workshop was also to discuss with Member States their strategy concerning the compatibility between the Land Parcel Identification System of IACS and Vineyard Register, knowing that this compatibility is required by Reg. 1593/00. This workshop was mostly dedicated to national administrations and organizations involved in the implementation of the Vineyard Register, both in Member States and Candidate Countries

One of the activities of the MARS Unit is to follow up the implementation of the Vineyard GIS by providing technical support both to Member States and to DG AGRI. The regulation on Vineyard Register is not recent (**Reg. (Council) 2392/86** and **Reg. (EC) 649/87**). However there was a lot of delay in the implementation of 'complete' Vineyard Register. For this reason it was decided to extend the deadline; those countries which were not ready had to implement a 'simplified register' with 'reference chart' (or 'base graphique de reference'). This new regulation (**Council) 1549/95** reinforced the geographical components of the Vineyard Register, encouraging the use of GIS and harmonisation with IACS. However, unlike arable land and Olive sectors, there is no obligation to set up a Vineyard GIS. In spite of that, some countries already decided to implement a GIS to improve the efficiency of Vineyard Register.

The workshop was organised in 5 sessions:

- ↓ **Session 1:** Context and requirements – IACS and Vineyard Register with presentation of both DG AGRI and JRC recalling the concept and regulation basis.
- ↓ **Session 2:** Presentation of the Vineyard Registers by Member States: one presentation for each country (Austria, France, Germany, Greece, Italy, Luxembourg, Portugal, Spain, UK).
- ↓ **Session 3:** round table on the compatibility between IACS and Vineyard registers.
- ↓ **Session 4:** Vineyard Register implementation in the candidate countries: one presentation for each wine-growing Candidate Country (Bulgaria, Czech Republic, Cyprus, Hungary, Malta, Romania, Slovak Republic, Slovenia)
- ↓ **Session 5:** Future of activities on Vineyard GIS



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Presentations



Wednesday 6 November

Session 1: Context and Requirements – IACS and Vineyard Registers

Session 1 - Welcome and introduction, by *Jacques Delincé, Unit Head of MARS Unit (IPSC, JRC Ispra)*

Summary

Jacques Delincé welcomed the participants. He introduced the MARS Unit team and people of DG AGRI present at the workshop. He gave some information about the activities of the MARS Unit. Then he made a brief historical recall for those who did not know him before. J. Delincé, now the Unit Head of the MARS Unit is involved in the Vineyard registers since a very long time. He was formerly in charge of IACS and Registers within the DG AGRI that he left in 1998 for a work at EUROSTAT. He is one of the fathers of this regulation on 'simplified' Vineyard Register.



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Session 1 - DG AGRI point of view, by Hans Barth, DG AGRI Audit of Agricultural expenditure

Summary

Hans-Erwin Barth is responsible for the audit of expenditures in the Wine sector, at the JRC, Unit j.2., Audit of agricultural expenses. Therefore he presented the point of view of Clearance of account. The role of his unit is to control the compliance of Member States with Wine Common Organisation Market and to approve expenditures regarding co-financing of the Commission. This will be the case for Vineyard Register within few months. However despite it comes to the end, H. Barth emphasised the very difficult 'birth' of Vineyard Registers; they started in 1986 but they were very much delayed and todate, there is still one Member State which did not yet complete its Vineyard Register. He would not say that Vineyard Register is a good example to follow, especially for Candidate Countries. A number of countries failed to implement a 'complete' Vineyard Register. The introduction of a 'simplified' VR was the first step towards a more 'integrated system'. However the consequence is that the situation varies from one MS to the other, with some diversity from one region to the other.

H. Barth emphasised the obligation to update the VR (art 5 of Reg. 2392/86), thus in order to be able to check the denial of new planting until 31/07/2010, which is the main purpose of VR from his point of view. The objective of this workshop is to be informed on the strategy and organisation of Member States concerning the use and updating of VR, as well as their approach concerning the obligation of compatibility with the VR.

Concerning this obligation he stressed that the deadline is very short now (2003).

He also emphasised that the VR is a management and control tool; the VR has a major role in the control of production potential, even if few measures are not directly based on vineyard area (but indeed they are indirectly).

(Presentation Powerpoint)



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Casier viticole communautaire : Point de vue de l'Unité d'apurement des comptes

Hans-Erwin Barth
Commission européenne
Direction Générale de l'Agriculture
Unité J.2 Audit des dépenses des
mesures de marché

Plan de la présentation

- ◆ EM concernés
- ◆ Pourquoi un casier (point de vue de l'apurement des comptes)
- ◆ Contexte historique
- ◆ Situation actuelle
- ◆ Mise à jour par les EM
- ◆ Le casier et le R contrôles
- ◆ Conclusions

Etats membres concernés

- ◆ Superficie totale vignoble en plein air supérieure à 500 ha
- ◆ Autriche, Allemagne, Espagne, France, Grèce, Italie, Luxembourg, Portugal et Royaume-Uni

3

Pourquoi un casier viticole (du point de vue apurement des comptes) ?

- ◆ Principe général d'interdiction de plantation nouvelle jusqu'au 31 juillet 2010
- ◆ Enregistrement de chaque vignoble existant, avec sa légalité formellement établie
- ◆ Chaque nouvelle plantation basée sur un droit valide, donc suivi des droits de plantation / replantation
- ◆ Vérification rapide de la légalité des vignobles : opérationnel pour les contrôles

4

Contexte historique

- ◆ Début de l'opération en 1986
- ◆ Echéance initiale au 1er août 1992, reportée à fin 1996
- ◆ Introduction du concept de base graphique de référence en juin 1995
- ◆ Report de l'échéance à fin 1998, puis fin 1999 et fin 2000 pour certains EM

5

Situation actuelle

- ◆ Réalisation parfois laborieuse
- ◆ Casier doit être opérationnel pour tous les EM concernés
- ◆ Diversité entre les EM : casier viticole complet ou base graphique de référence
- ◆ Diversité même au sein de certains EM
- ◆ R 2392/86 toujours en vigueur

6

Obligations de mise à jour par les EM (art. 5 R 2392/86)

- ◆ Mise à jour régulière du casier
- ◆ Vérification, au moins tous les 5 ans, de la correspondance casier - situation réelle de l'exploitation

7

Le casier et le R contrôles (2729/00 art. 5)

- ◆ Contrôle du respect d 'interdiction de plantation nouvelle (art. 2, § 1er du R 1493/99) avec la base graphique de référence ou par des mesures alternatives
- ◆ Dispositions relatives au potentiel de production (titre II du R 1493/99) contrôlées avec casier ou base graphique de référence, donc principalement :
 - ✓ plantation de vigne
 - ✓ prime d 'abandon
 - ✓ restructuration et reconversion

8

Conclusions : utilisation opérationnelle du casier

- ◆ Outil administratif de contrôle
- ◆ Pilier de l'application effective du principe d'interdiction de plantation nouvelle
- ◆ Contrôle clé :
 - ✓ du suivi des droits de plantation / replantation
 - ✓ du paiement des aides communautaires liées au potentiel de production



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Session 1 – Overview of concepts and situation, by *Josiane Masson and Olivier Léo*,
MARS Unit (IPSC, JRC Ispra)

Abstracts

During this presentation Olivier Léo (Deputy Head of MARS Unit) recalled first the context and objectives of Vineyard Register and Regulation outlines. The MARS Unit has been very active in the field of Vineyard Registers in the 90's, with a series of technical studies (on cadastre and on the quality of VR). The initial regulations (Reg (Council) 2392/86 and Reg. (EC) 649/87) defined the VR as an exhaustive census of the potential with annual updates, which was a huge task (explaining partly that it failed in some countries). The vineyard parcels are defined as cadastral parcels or as geographical entities. The regulation put emphasis on the agronomic characteristics (31 data, 16 being compulsory) but the vineyard area is not very well defined. Due to the large amount of data to be collected, the system is heavy (and not easy to maintain). The initial deadline (1992) was only met by smallest Member States (L, UK). A new regulation was introduced (Reg (Council) 1549/95) to extend the deadline until 31/12/96 and to solve the problem of MS without suitable cadastre (Portugal, Greece). It introduced the concept of 'simplified' VR with 'reference charts' or 'base graphique de reference' for a better location of Vineyard Register. There was no Commission Regulation but a paper working document by the Commission. Then the Wine CMO was reformed with Reg. (Council) 1493/99 which reinforced the limitation measures: new plantation strictly limited, uprooting of illicit plantation and definitive grubbing premium in some regions. Todate only 1% of vineyard area is subsidised, however for 99% area a solution has to be found for illicit plantation. With the reform, the management and control of potential as well as the inventory of potential become even more important. In this context geographic information and GIS functionalities can be considered as useful tool and technical solution.

O. Leo presented an overview of the status in the UE: the VRs in UE cover about 3.6 M ha, 1.75 M holdings and 11 M parcels. 'Complete' VRs in 5 countries covering 32% of area and 41% parcels (France, Germany, Austria, Luxemburg, UK) and 'Reference charts' in 4 countries (Spain, Italy, Portugal, Greece). 90% of VRs area is covered by



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cadastre. In comparison with IACS and Olive GIS the VRs has to face difficulties: very small parcels (0.1 to 0.52 ha with a lot of regional discrepancies), difficulties to place the vineyard boundaries and calculate the area, lack of annual declarations.

In parallel the technology changed dramatically during those last year: more affordable GIS tools, capacity to handle huge volumes of data, Web technology for the diffusion of data etc. With the improvement of resolution it is now technically possible to use orthophotos or orthoimages; 0.5m – 1m IACS orthophotos now cover the majority of UE. However the issue of appropriate scale of mapping should be properly addressed, depending on local situation. O. Leo presented some examples. The issue of area definition and measurement was also addressed.

(Presentation Powerpoint)



1st WORKSHOP ON THE LAND PARCEL
IDENTIFICATION SYSTEM IN THE CONTEXT
OF THE VINEYARD GIS

ISPRA, 6 and 7 November 2002

Overview of concepts and situation

*Josiane MASSON, Olivier LEO
IPSC, MARS Unit*

Summary

- **JRC and MARS role and background**
- **Present situation of the Vineyard in Europe (overview)**
- **Regulatory basis & Functions of the Vineyard Registers**
- **Technical issues**
- **Future challenges and questions**

- **Technical support to DG AGRI and Member-States**
 - ✓ **Market Unit** **Unit C 4**
 - ✓ **Audit Unit** **Unit J 2** **(ex A1-2)**

- **Activities**
 - ✓ **Technical follow-up of the implementation by Member States**
 - **In support to DG AGRI**
 - ✓ **Evaluation of systems in place**
 - ✓ **Pilot studies linked to science and technology**
 - **Remote sensing (satellite and airborne imagery)**
 - **GIS, GPS**
 - **Area frame sampling, Statistics**
 - **Agro meteorological models**

- **Technical follow-up of the implementation by Member States**
 - ✓ **Support missions organised by DG AGRI**
 - ✓ **Study on suitability / quality of Cadastre, 8 MS** **91-92**
 - ✓ **Evaluation studies in 4 MS (FR, IT, SP, GE)** **93- 94**
 - ✓ **Support to the Greek program (OLI-VITI SIG)** **02- 03**

- **Pilot studies**
 - ✓ **Methodologies for the 'simplified' register (GR, PO)** **92**
 - ✓ **Study on the use of RS images for vineyard registers** **93**
 - ✓ **Vinident Studies / identif. of vineyard on Aerial photo** **97**

- **Agro-meteorological studies - using CGMS**
 - ✓ **Prediction of yield, OLIWIN 1 and 2** **94-96**
 - ✓ **WIPP study (in preparation in Coop with IHCP)** **2003**

- JRC and MARS role and background
- Present situation of the Vineyard in Europe (overview)
- Regulatory basis & Functions of the Vineyard Registers
- Technical issues
- Future challenges and questions

- EU 15 on the World wine market:
 - ✓ 45 % of vineyard area
 - ✓ 60% of world wine production
 - ✓ 70% of world wine export
- Since 1962: Wine Common Market Organisation (CMO)
 - ✓ Reduce and restructure vineyard: vineyard removal subsidies ...
 - ✓ Actions on price and intervention, retrieving production from the market (distillery...)
 - Consequence: from 1994/95 balance production / consumption
 - Vineyard area: 1987 4 M ha vs. 3.4 M ha in 1997
- But new conditions appeared:
 - ✓ Candidate Countries: BU + HU + RO = 1/3 UE imports
 - ✓ more and more competitors : US, Chili, Argentina, South Africa, Australia ...
- Reform of CMO became necessary: failed in 1994 but finally adopted within Agenda 2000 plan

Overview of the situation in the UE

Statistic on Vineyard Areas (x 1000 Ha) EU 15

	TOTAL AREA under VINEYARD (C2410)				Type of production (% of area)		
	1990	1999	Evolution 99 / 90	% total EU	Cuve (C2440)	Dry raisin (C2416)	Fresh Fruits (C2415)
Spain	1.453,8	1.166,0	-20%	34%	96,9%	0,2%	2,9%
Italia	1.050,8	908,3	-14%	26%	92,0%	0,0%	8,0%
France	936,4	890,0	-5%	26%	98,8%	0,0%	1,2%
Portugal	264,4	220,1	-17%	6%	100,0%	0,0%	0,0%
Greece	157,8	128,3	-19%	4%	17,7%	34,8%	47,6%
Germany	95,0	101,3	7%	3%	100,0%	0,0%	0,0%
Austria	54,9	47,9	-13%	1%	100,0%	0,0%	0,0%
Luxembourg	1,3	1,3	-2%	0,04%	100,0%	0,0%	0,0%
United Kingdom	0,8	0,8	-5%	0,02%	100,0%	0,0%	0,0%
Belgique	0,05	0,02	-56%	< 0.001%	4,8%	0,0%	95,2%
Netherlands	0,02	0,03	88%	< 0.001%	0,0%	0,0%	100,0%
Irlande	0,0	0,0					
Denmark	0,0	0,0					
Finland	0,0	0,0					
Sweden	0,0	0,0					
EU15	4.015,4	3.464,0	-14%		93,5%	1,4%	5,2% (ZPA1)

NB: Germany includes ex RDA since 91
Slight trend to decrease . Presently rather stable areas

Overview of the situation in the CC

Statistic on Vineyard Areas (x 1000 Ha) Candidate Countries

	TOTAL AREA under VINEYARD (C2410)				Type of production (% of area)		
	1990	1998	Evolution 98 / 90	% total CC	Cuve (C2440)	Dry raisin (C2416)	Table Var. (C2417)
T Turkey	581,00	602,00	4%	51%	n/a	n/a	n/a
RO Roumania	223,60	253,90	14%	22%	92%	0%	8%
HU Hungaria	138,00	129,66	-6%	11%	0%	0%	0%
BG Bulgaria	149,00	116,88	-22%	10%	87%	0%	13%
CY Chyprus	25,20	19,87	-21%	2%	0%	0%	0%
SK Slovak Rep.	23,84	18,93	-21%	2%	n/a	n/a	n/a
SI Slovenia	22,00	17,18	-22%	1%	n/a	n/a	n/a
CZ Czech Rep.	16,00	11,23	-30%	1%	n/a	n/a	n/a
MT Malta	0,30	0,30	n/a	n/a	n/a	n/a	n/a
EE Estonia	0,00	0,00		0%			
LT Lithuania	0,00	0,00		0%			
LV Latvia	0,00	0,00		0%			
PL Poland	0,00	0,00		0%			
CC13	1178,94	1169,95	-1%	100%	n/a	n/a	n/a
CC10	225,34	197,17	-13%	17%	n/a	n/a	n/a

Sources:
• EUROSTAT (fichiers ZPA1)
• Except Turkey (O.I.V.) & Malta

**Enlarged European Union
Statistic on Vineyard Areas (x 1000 Ha)**

	TOTAL AREA under VINEYARD (C2410)					Evolut. / 90	Evolut. / 99
	1990	1999	2003	2004	2007?		
EU 15	4.015	3.464	3.532			-12,0%	2,0%
EU 25				3.729		-7,1%	7,6%
EU 28					4.702	17,1%	35,7%

NB: 2003 based on 1999 + all new planting rights (article 6)
EU 25 and EU 28 based on 2003 + CC (98)

Sources:

- EUROSTAT (fichiers ZPA1)
- Except TURKEY (50% of CC 13): O.I.V.

- JRC and MARS role and background
- Present situation of the Vineyard in europe (overview)
- **Regulatory basis & Functions of the Vineyard Registers**
- Technical issues
- Future challenges and questions

A story with 3 main chapters:

- ✓ **Chapter I : 86-87 Initial Regulations**
 - Council + Commission
 - “ Classical” Registers
- ✓ **Chapter II : 95-96 Prolongation and Review**
 - Abandon of 94 Reform
 - Council only
 - “ Reference charts ” – “Simplified Registers”
- ✓ **Chapter III : 99-00 Market Regulations**
 - Reform of the market
 - Council + Commission
 - Potential and production
 - Potential remain based on former systems

Definition of vineyard registers: Reg 2396/86 (Council) + 649/87 (Commission)

- ✓ **to Collect information on potential and production**
 - required by the CMO (Reg. 337/79, Reg. 3805/85)
- ✓ **to support the management of intervention measures**
 - Distillation / up-rooting premium
 - Plantation rights
 - Controls on production.
- ✓ **Both :**
 - Assessment of the “potential” – Statistics to administrate CMO
 - 100 % exhaustive
 - Administrative and control tools (+/- 10 % of vineyards)
 - indirectly, support to sector / regional policies

Definition of vineyard registers: Reg 2396/86 (Council) + 649/87 (Commission)

- ✓ **practical implications:**
 - **A huge initial investment: Exhaustive census of the potential**
 - *Parcels and description of plantations*
 - *Viti - vini holdings*
 - **A system to administrate & control**
 - *declared change of structure*
 - *new plantations /or uprooting*
 - **A yearly update of the census as an output of the Administration and control**

Definition of vineyard registers: Reg 2396/86 (Council) + 649/87 (Commission)

- ✓ **The 2nd regulation involving the creation of registers of parcels and holdings**
 - Olive Tree (75 - 79).... Arable land (92)
 - Based on national experience (especially FR).

✓ **definition of geographic parcel ? (Article 2: Point f).**

- "*parcelle*", une portion continue de terrain, telle que delimitée dans le cadastre foncier".
- No Cadastre ? ... "*une portion continue de terrain, ... qui constitue une entité distincte en ce qui concerne le mode de faire valoir, le type de culture et la nature de la production.*"

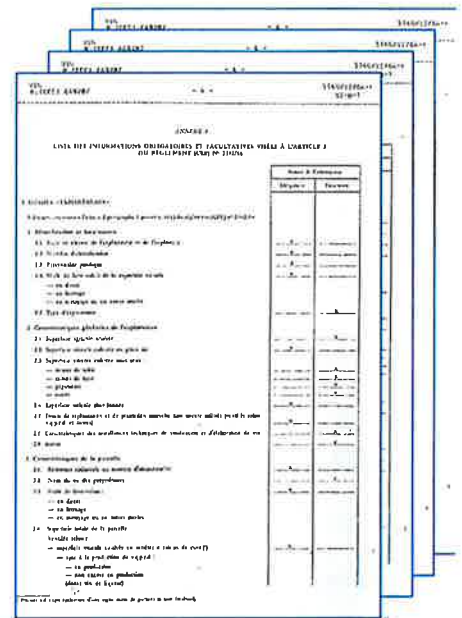
- ✓ **No detailed definition of area...**
 - *net/ gross?*
 - *Projected?*



Definition of vineyard registers: Reg 2396/86 (Council) + 649/87 (Commission)

- Agronomic definition of the parcel
 - ✓ Very detailed description of the parcel
 - 31 elements of information
 - 16 elements compulsorily
 - + 15 facultative...
 - (cf. Art 3 & Annex 1)
 - ✓ increase the complexity of the system
 - Structure of the databases,
 - Links between DB / GIS
 - Retroactive effect on the parcel definition (GIS)

Ex FR: 3,5 Mio Parcels
14 Mio "sub" parcels



Implementation of Vineyard registers: Reg 2396/86 (Council) + 649/87 (Com.)

- ✓ initial schedule of 6 years... deadline of 92
 - 92 : only smallest MS: Luxembourg , England
 - 93-95: France, Germany, Italy, Spain (partly)
 - Portugal 98 - 2001
 - Greece 2003?

II - Simplified Registers” : Reg 1549/95 – Council

- ✓ Extension of the delays and deadline to 31 Dec 96
 - Technical problems
 - Problem of non-availability of reference maps.
 - Entry of new MS Austria
- ✓ To implement “Reference charts” covering entire area / vines
 - FR: “Base graphique de reference”

Interpretation by the Commission of 1549/95 ?

- ✓ **“SIMPLIFIED Register”** Working Doc. ref VI/694-8 / 96
- ✓ Exhaustive map of the “vineyard perimeter”
- ✓ Focus Vineyard Register (parcel level)
 - To Parcels declared / subject to controls
 - to compulsorily characteristics (2nd priority to agro. information)
- ✓ Harmonize procedure with IACS
 - Declarative & Control approaches
 - Instead of census
- ✓ Reinforce Geographic component of the system
 - synergy with Olive-Tree and Arable lands
 - Take into account Italian Initiative **Vineyard GIS ?**

• Interpretation by the Commission of 1549/ 95 ?

- ✓ **Doc. of 18/04/96 on “SIMPLIFIED Register”**
 - doc VI/694/96: Definition of VITI GIS & proposal of technical specifications 9 pp
 - doc VI/695/96: Proposal of Commission regulation on the modalities of 1549/95 5 pp
 - doc VI/696/96: Analysis of regulatory aspects of area based declaration 3 pp
 - doc VI/696/96: Financial requirements of VITI GIS 1 pp

→ Available in FR
- ✓ **But remain Working documents**
 - No regulatory value
 - But provided indication to MS implementing Ref. charts

→ *Esp, Ita, Po, GR....*
- ✓ Similar evolution lead to new Reg. in Olive Oil Sector (Reg. 2388/98) **OLI-GIS**

III - Wine Market Reform: Reg 1493/99 Council

✓ Context & Rationales

- Abandon of 94 Reform
- Less production surplus and intervention
- Export without any support
- Uruguay round / Increase competitiveness
- Simplify present regulation



✓ ... 84 pages Covering both “potential” & “production”

➤ Potential

- Maintain balance: new plantation strictly limited
- Premium for definitive grubbing in regions with problems
- Reinforce Quality policy: restructuring and reconversion

➤ Production

- Intervention limited to exceptional crisis
- Appellation of origin , Quality policy
- Rules for exportation / importation, etc...

III - Wine Market Reform: Reg 1493/99 Council

✓ A - Management and control of the “potential”

➤ New plantation strictly limited

- *Strict interdiction of new planting* → 31/ 07/ 10 **Art 2.1**
- *numerous cases of derogation* **Art. 2.3**
- *Up rooting of illicit plantation* **Art 2.7**

➤ New plantation rights

- *Transition period (VQPRD - AO)* → 31/ 07/ 03 **Art 3.2**
- *within a total quota defined 51 000 ha (+ 1.5%)* **Art. 6 .1**
- *Conditioned by Inventory (Art 16)* **Art 6.2**

➤ Planting rights corresponding to normal management (generated by uprooting of eligible Vineyard) **Art 4. 2**

➤ Management of National / regional “reserve(s)” **Art 5**

- *With possible derogation by MS*
- *Extra “Reserve communautaire” (17 000ha)* → 31/12/03 **Art 7.2**

III - Wine Market Reform: Reg 1493/99 Council

- ✓ Management and control of the “potential”
 - Premium for definitive grubbing
 - conditioned various criteria defined by MS (regions with problems, environment) Art 8.2
 - no planting rights for the farmer nor the parcel Art 8.3
 - Abandoned / not maintained area are non eligible Art 9 b
 - Restructuring and reconversion Art 11
 - Plans and modalities defined by MS Art. 2.3
 - Conditioned by completed inventory (Art 16) Art 11.4
 - Practical modalities to be defined by MS Art 15 + Art 75

III - Wine Market Reform: Reg 1493/99 Council

- ✓ **B - Inventory of the potential** Art 16
 - Census of all vineyards and planting rights
 - To be completed before 31/12 / 2001 Art 16.2
 - Census of non classified varieties →uprooting Art. 19
 - Different from the Reference charts / registers
 - Statistical info Methodology / accuracy?
 - Condition new planting rights / restructuring Art 6.2 and 11.4
 - Non validity of the inventory in case of non updating Article 23 .4
 - Practical modalities to be defined by MS Art 23 + Art 75

III - Wine Market Reform: Reg 1493/99 Council

- ✓ **Time & follow-up in the control of the “potential”**
 - Plantations before or after 1/09/98 Art 2.7
 - Deadline to attribute new planting rights 31/07/03 Art 6
 - Deadlines to use new planting rights
 - 2nd campaign after attribution Art 3.4 + Art 5.6
 - Deadlines to use normal planting rights
 - 5th campaign after uprooting Art 4.5
 - Life of planting right in a reserve
 - 5th campaign after allocation to reserve Art 5.5
 - Deadline for grubbing
 - 3 years after new planting in case of derogation Art 2.2.d + Art 13.a
 - 15 years for non-classified varieties Art 19.5
 - Non eligibility after definitive grubbing premium
 - Maximum 10 campaigns
 - after infraction Art 9 a
 - after planting Art 9 c
 - after restructuring subsidies Art 9 d

Wine Market Reform: Reg 1493/99 Council

- ✓ **Management and control of Planting rights**
 - A key elements to control potential (area under Vineyard)
 - Council Reg. clarify
 - a number of rules
 - and general procedures
 - national/ regional “reserve”
 - MS have to define their Plan (Restructuring) and detailed modalities
 - ✓ **A rather complex mechanism involving management of**
 - Geographic information
 - Time periods
 - ✓ **Increased requirement of control of declaration**
 - cross check with reference charts (geographic control)
 - follow up of parcels rights (time)
 - ✓ **But also control of illicit planting** **geographic tools**
- But how?**

Wine Market Reform: Reg. 2729/00 Commission

✓ Control of potential - Article 5

➤ Systematic use of the Vineyard register

- *“For the purpose of compliance with the provisions on production potential laid down in Title II of Regulation (EC) No 1493/1999 Member States shall make use of the vineyard register or reference charts, as applicable, in accordance with Council Regulation (EEC) No 2392/86”*

➤ Systematic control of applications (100%)

- *Permanent abandonment, restructuring and conversion receiving a contribution from the Community shall be systematically verified on the spot. The plots checked shall be those which are the subject of an application for aid.*

Wine Market Reform: Reg. 2729/00 Commission

✓ Control of potential - Article 5

➤ Raise a number of questions :

- Up-dating of the Registers / Ref. Chart ?
- Methodology and accuracy of the Inventory (art 16) ?
 - *Link of the inventory with the registers?*
- Follow-up of the controls ?
 - *Checking*
 - *Change of status for 2,3,5 10 years*
- Identification of non-declared changes ...
 - Illicit plantation ?
 - Abandoned or non maintained area ?

Summary Estimates on Vineyard Registers

	Vineyard Area Ha	Farmers Number	Parcels Number
Spain	1.200.000	340.000	3.100.000
France	1.000.000	350.000	3.500.000
Italy	940.000	380.000	2.100.000
Portugal	250.000	360.000	1.000.000
Greece	115.000	190.000	500.000
Germany	100.000	100.000	1.000.000
Osterreich	54.000	36.000	280.000
Luxembourg	1.300	800	2.500
United Kingdom	1.000	120	400
TOTAL EU 15	3.600.000	1.750.000	11.000.000

- **NB:**
 - ✓ *Indicative figures* (Range of order and volumes of data)
 - ✓ *Parcels may be over-estimated* (intersection with Cadastre)
 - ✓ *Holdings may include both Farmers and Vine growers.*

Type of system / geographic information

	Classical Simplified	no Cadastre Cadastre	Paper Digital	Area	Farms	Parcels
Spain				1.200.000	340.000	3.100.000
France				1.000.000	350.000	3.500.000
Italy				940.000	380.000	2.100.000
Portugal				250.000	360.000	1.000.000
Greece				115.000	190.000	500.000
Germany				100.000	100.000	1.000.000
Osterreich				54.000	36.000	280.000
Luxembourg				1.300	800	2.500
U. Kingdom				1.000	120	400
TOTAL EU 15				3.600.000	1.750.000	11.000.000

- **NB:**
 - ✓ *Greece: Simplified Register (Reference Charts) are still under implementation*
 - ✓ *DE, OST, LUX, UK is partly digital or in phase of digitization.*

Overview of the Status in the UE

Type of geographic information / system in EU 15

	M States	Area	Farmers	Parcels
Classical Register	F, D, O, L, UK	1 160 000 32 %	480 000 27 %	4 500 000 41 %
Reference Charts (Simplified Reg.)	E, I, P, GR	2 500 000 68 %	1 270 000 73 %	6 500 000 59 %
Cadastre based	E, F, I, D, O, L, UK	3 240 000 90 %	1 200 000 69 %	9 500 000 86 %
Non Cadastre based	P, GR	360 000 10 %	550 000 31 %	1 500 000 14 %
Digital Maps (or in progress)	E, I, D, O, L, P, GR, UK,	2 600 000 72 %	1 400 000 80 %	7 500 000 68 %
Paper maps	F	1 000 000 28 %	350 000 20 %	3 500 000 32 %

Overview of the situation in the UE

Vineyard Registers – Importance of Plantation rights

	Vineyard Area Ha	Max new plantation rights ha	% Total Area	Restructuring Plans	Normal turnover Planting / grubbing
Spain	1.200.000	17.355	1,4%	Restructuring volumes for EU 15: 00-01: 54000 ha 01-02: 60 000 ha 02-03: 68 000 ha 1.5- 2 %	?
France	1.000.000	13.565	1,4%		?
Italy	940.000	12.933	1,4%		?
Portugal	250.000	3.760	1,5%		?
Greece	115.000	1.098	1,0%		?
Germany	100.000	1.534	1,5%		?
Osterreich	54.000	737	1,4%		?
Luxembourg	1.300	18	1,4%		?
U. Kingdom	1.000	0	0,0%		?
<i>Common Pot</i>		17.000			
TOTAL EU 15	3.600.000	68.000	1,9%		?

For vineyard
30 -50 years

2 - 3 %

NB:

- ✓ Max planting rights (quotas from article 6)
- ✓ Restructuring volumes provided by DG Agri

- JRC and MARS role and background
- Present situation of the Vineyard in Europe (overview)
- Regulatory basis & Functions of the Vineyard Registers
- **Technical issues**
- Future challenges and questions

- **“Technical” questions and technical solution.**
- **The technology and the systems have made dramatic progress since 10 15 years**
 - ✓ **In terms of geomatics**
 - Aerial orthophoto
 - satellite ortho image
 - GPS technology for positioning and measurement
 - ✓ **Geographic information System**
 - ✓ **and distribution of geographic information**
 - Web technologies
 - telematique

Technical development in ITALY ...

	B	Dk	D	Es	Fr	Gr	It	Irl	Lux	NL	P
80											
81											
82											
83											
84											
85											
89											
90											
91											
92											
93											
95											
96											

Implementation & management of "Half GIS":

- Alphanumerical databases
- Transparent maps superimposed / paper aerial photos

Test of digital Photo-maps

- Scanned cadastre // digital photo (polynomial)

Implementation and management GIS /digit

- Olive-tree GIS, Vineyard GIS
- Arable lands (IACS)

**Migration to Complete Orthophoto coverage
Integration of the 3 Systems**

99- 2002 Web Applications (intranet / internet)

Italia: 300 000 km²

Vineyard:

400 000 farmers, 850 000 ha

Olive -Trees:

700 000 farmers, 850 000 ha

**Volumes of the GIS:
Italia: 300 000 km²**

Maps and Parcels

- 200 000 cadastral maps
- 50 Mio cadastral parcels
- 11 Mio Agric. Parcels vect.
(5 Mio IACS + 3 Oll + 3 Vill)

Orthophotos

- 280 000 km²
- 9 000 orthos.

• In comparison with IACS or OLIGIS, VITI sector face the following technical issues

- ✓ **Very small parcels**
 - Scale of survey/ mapping
- ✓ **Definition of area**
 - Accuracy of measurement
 - Equivalence to pure area ?
- ✓ **Use of ortho-imagery**
 - identification of Vineyard
 - requirement of field visit (variety, confusion /omission)
- ✓ **A non declarative system**
 - Strategy of updating the census
 - Strategy for searching non declared changes?

• Very small parcels

	Vineyard Area Ha	Farmers Number	Parcels Number
Spain	1.200.000	340.000	3.100.000
France	1.000.000	350.000	3.500.000
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TOTAL EU 15	3.600.000	1.750.000	11.000.000

Mean parcel size ha

0.38

0.29

0.45

0.25

0.23

0.10

0.19

0.52

0.25

33 ares



• Very small parcels

✓ Rather contrasted regional situations (source JRC)

➤ mean parcel FR :

- Chamery (CHAMPAGNE) 8 ares
- Cabasse (PROVENCE) 48 ares
- Manciet (ARMAGNAC) 46 ares
- Pomerol (LANGUEDOC) 63 ares

➤ mean parcel ITA :

- Ormelle (TREVISE) 1.8 ha
- Montelupo (TOSCANA) 1.2 ha
- Pelago (TOSCANA) 3.1 ha
- Margherita di Savoia (FOGGIA) 5.7 ha
- Calamonaci (AGRIGENTE) 1.5 ha

✓ Histogram more pessimistic

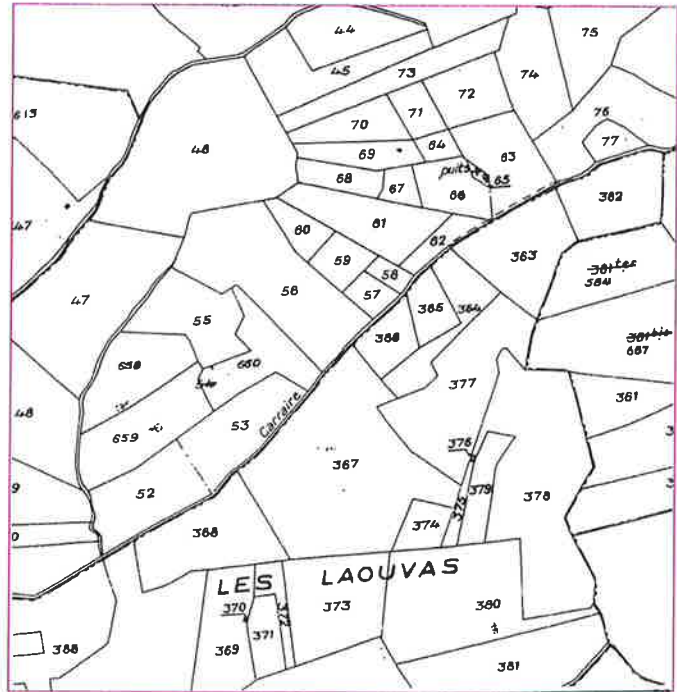
➤ Median (50% of the parcels) is always smaller than the mean



Appropriate Scale of mapping ?

- ✓ Example of 3 zones in France
- extracts of cadastre Maps (20 x 20 cm)

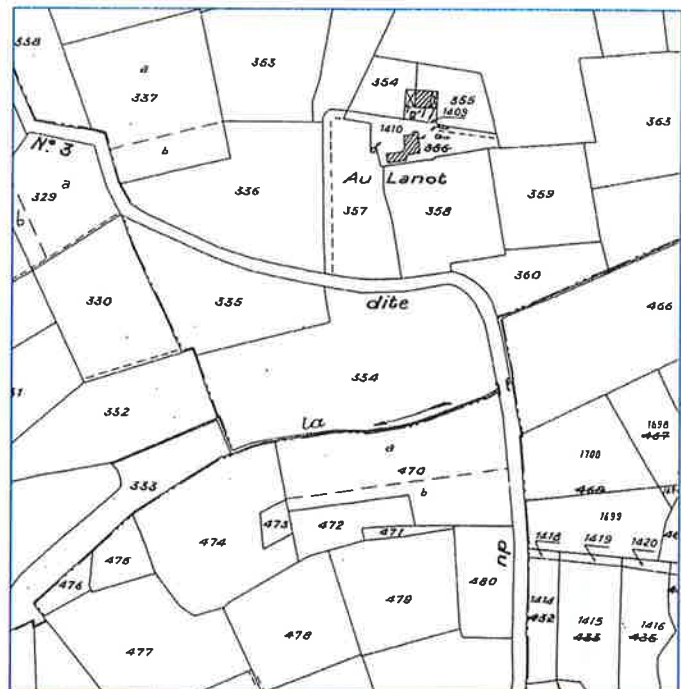
COTES de PROVENCE
Cabasse (Var)



Appropriate Scale of mapping ?

- ✓ Example of 3 zones in France
- extracts of cadastre Maps (20 x 20 cm)

ARMAGNAC
Manciet (Gers)

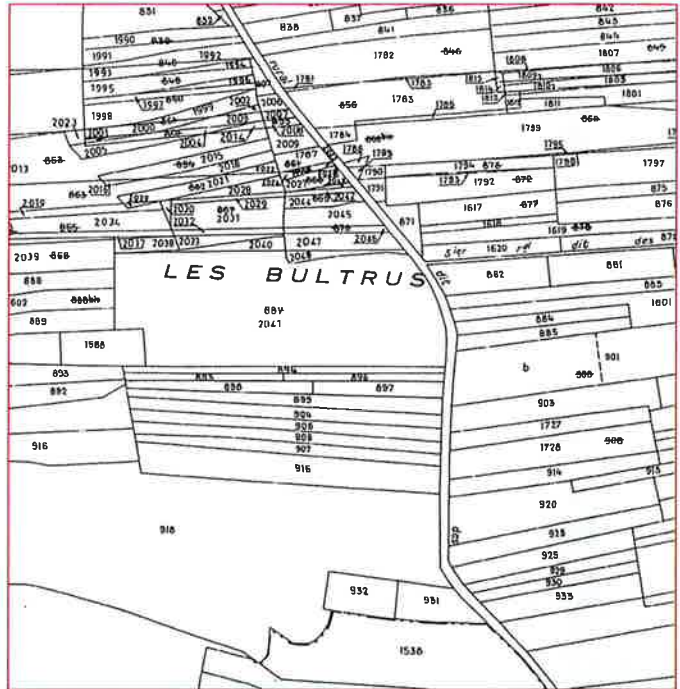




Appropriate Scale of mapping ?

- ✓ Example of 3 zones in France
 - extracts of cadastre Maps (20 x 20 cm)

CHAMPAGNE
 Chamery (Marne)

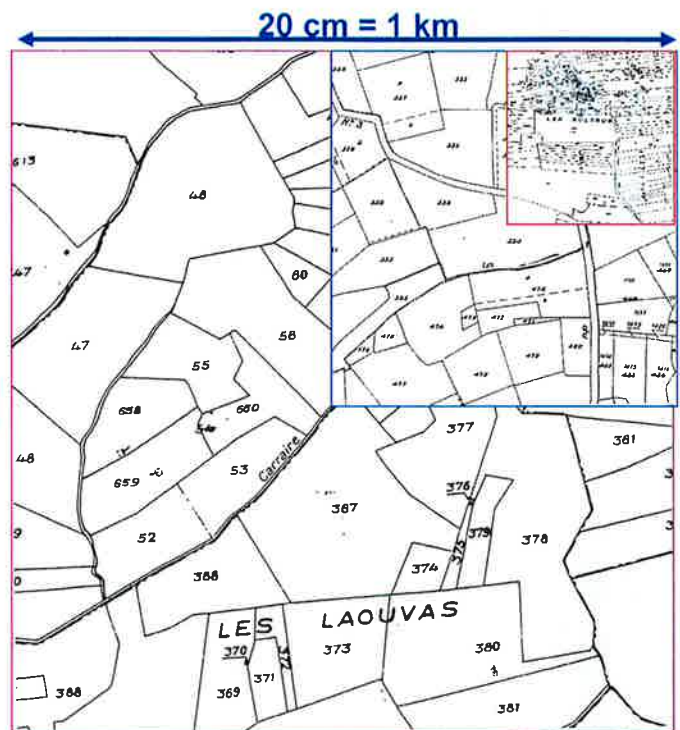


Appropriate Scale of mapping ?

But 3 different scales

- ✓ Cabasse : 1 / 5 000
- ✓ Manciet : 1 / 2 500
- ✓ Chamery : 1 / 1 250

"Displayed" at the 1 / 5000



Appropriate Scale of mapping ?

But 3 different scales

- ✓ Cabasse : 1 / 5 000
- ✓ Manciet : 1 / 2 500
- ✓ Chamery : 1 / 1 250



“Displayed” at the 1 / 10 000 ?

- ✓ 100 “compression” factor between 1/1 000 & 1/10 000
- ✓ 25 “compression” factor between 1/1 000 & 1 / 5 000

• Definition of area

✓ Should be in any case a projected area

- The only pragmatic approach
- Coherency with the state of art , with cadastre
 - With LPIS recommendations
 - avoid endless discussion for terraces



✓ But is this clearly understood and applied?

- For septentrional Vineyards slope / exposure modify the potential
- How field measurements are carried out ?

- **Definition of area**

- ✓ **Range of variation between projected/ natural terrain**

Estimation of difference between "natural" and projected areas			
Type of Landscape	Slope %	Max linear difference %	Max area difference %
Flat plains	0 - 1	0.005	0.01
Plains and plateaus	1 - 4	0.08	0.16
Agricultural hills	4 - 8	0.3	0.6
Marginal arable slopes	8 - 15	1.1	2.3
Steep slopes (perm. crops, pastures)	15 - 30	4.4	9.0
Mountainous pasture land	30 - 50	11.8	25.0

- **Definition of area**

- ✓ **Practical recommendations on measurement**
 - Limit is the last row plus half a spacing / rows
 - Definition of the area to be included
 - + Minimum space required for machinery...
- ✓ **Technical tolerances? Complex issues**
 - Area under declared / over declared
- ✓ **Case of old plantations**
 - Definition of the "holes" to be counted or not (missing plants)
- ✓ **Case of associated crops**
 - Vineyard + fruit trees, Vineyard + Olive trees
- ✓ **In all cases, definitions and practical recommendations**
 - should be defined at national /regional level
 - to be applied consistently



- Accuracy of measurement ?
 - ✓ measurement instrumentation
 - Station total
 - Differential GPS
 - ✓ The perimeter Approach from LPIS
 - ✓ The uncertainty of the parcel boundaries
 - ✓ Easier situation in case of high quality cadastre
 - Intensive vineyard area
 - with border stones, etc
 - but measurement of cadastre parcel # real vineyard
 - Discrepancies between 5 - 8 % are frequent



- Relative accuracy may appear high for very small parcels

Technical Tolerance: 0,50 metre		Accuracy in m2 - Precision en m2											other:	
Shape of the parcel Forme de la parcelle	Coeff. b/a	Area of the parcel ha - Surface de la parcelle en Ha												
		0,1	0,3	0,5	1	2	5	10	15	20	30	50	100	
Circle Circulaire n.a.	n.a.	56	97	125	177	251	396	560	686	793	971	1253	1772	79
Square - carré	1	83	110	141	200	283	447	632	775	884	1095	1414	2000	89
Rectangle - Rectangulaire	2	67	116	150	212	300	474	671	822	949	1162	1500	2121	93
Long rectangle - Rectangle allongé	4	79	137	177	250	354	559	791	968	1118	1389	1788	2500	112
Elongated - allongé	8	101	174	225	318	450	712	1008	1232	1423	1743	2250	3182	142
Very Elongated - Très allongé	16	134	233	301	425	601	950	1344	1648	1901	2328	3005	4250	190
Other :	30	179	310	400	566	800	1268	1790	2192	2531	3100	4002	5660	253

Technical Tolerance : 0,50 metre		Accuracy in % of the area - Precision en % de la surface											other:	
Shape of the parcel Forme de la parcelle	Coeff. b/a	Area of the parcel ha - Surface de la parcelle en Ha												
		0,1	0,3	0,5	1	2	5	10	15	20	30	50	100	
Circle Circulaire n.a.	n.a.	5,6%	3,2%	2,5%	1,8%	1,3%	0,8%	0,6%	0,5%	0,4%	0,3%	0,3%	0,2%	4,0%
Square - carré	1	6,3%	3,7%	2,8%	2,0%	1,4%	0,9%	0,6%	0,5%	0,4%	0,4%	0,3%	0,2%	4,5%
Rectangle - Rectangulaire	2	6,7%	3,9%	3,0%	2,1%	1,5%	0,9%	0,7%	0,5%	0,5%	0,4%	0,3%	0,2%	4,7%
Long rectangle - Rectangle allongé	4	7,9%	4,6%	3,5%	2,5%	1,8%	1,1%	0,8%	0,6%	0,6%	0,5%	0,4%	0,3%	5,8%
Elongated - allongé	8	10,1%	5,8%	4,5%	3,2%	2,3%	1,4%	1,0%	0,8%	0,7%	0,6%	0,5%	0,3%	7,1%
Very Elongated - Très allongé	16	13,4%	7,8%	6,0%	4,3%	3,0%	1,8%	1,3%	1,1%	1,0%	0,8%	0,6%	0,4%	9,8%
Other :	30	17,9%	10,3%	8,0%	5,7%	4,0%	2,5%	1,8%	1,5%	1,3%	1,0%	0,8%	0,6%	12,7%

- 50 cm border uncertainty corresponds to:
 - 8 – 16 % for 0.1 ha parcels (according to elongation)
 - 6 – 12 % for 0.2 ha parcels (according to elongation)
 - 5 – 10 % for 0.3 ha parcels (according to elongation)

- Use of ortho-imagery
 - ✓ 50cm-1m ortho becomes widely available (LPIS)
 - airborne aerial photography ORTHO PHOTO
 - ✓ future development
 - Satellite imagery (IKONOS, QUICK BIRD)
 - Airborne digital imagery
 - Scale standards and minimum requirements for IACS
 - ✓ But Vineyard
 - Present numerous different planting pattern
 - can be confused with other type of cultivations
 - According to regional context
 - fenced fruit trees / berries
 - Specialised crops (Asparagus, water melon...)
 - ✓ Use of ortho-imagery ?
 - as a support to field inspections /identification
 - with appropriate strategies
 - Control
 - Updating / pre- identification of change

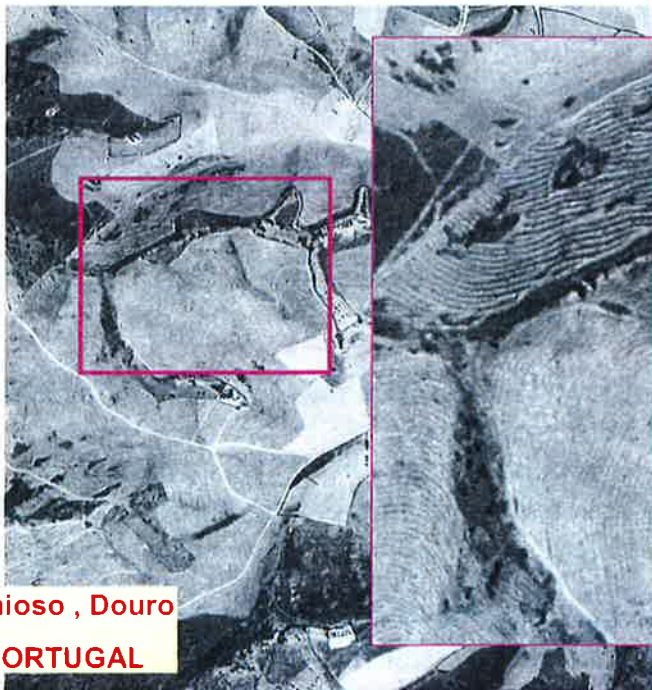




Fig. 1/25.000 ; June 1996 panchromatic image of 0.6m pixel
Illustration of how fruit orchards (red) have been wrongly interpreted as vineyard (yellow) ; commission errors



1m ortho Photo (from IACS)



Vimioso , Douro
PORTUGAL

- Satellite 60 cm image (Quickbird)



Trapani, ITALIA
(Feb 2002)

1st Workshop

- A “non declarative” system

- Subsidies concern small percentage of areas
 - Range of 1 -2 %
 - New plantation, Restructuration, Abandon,
 - Dry grapes (GR, SP)
- The Reg. requires an exact and exhaustive census of all Vineyards
 - initial investement ,
 - to be regularly updated
- Is the yearly administration on 5- 10% sufficient to maintain the quality of the graphical information on 100%?
 - Frauding farmers have no reasons to declare
 - illicit plantations
 - abandoned or non maintained vineyard
 - Strategy for searching non declared changes?
 - synergy with feed back of other systems and controls (IACS, Olive GIS) ?
 - specific survey ?
 - Regular consolidation for instance / 5 years?

- JRC and MARS role and background
- Present situation of the Vineyard in europe (overview)
- Regulatory basis & Functions of the Vineyard Registers
- Technical issues
- **Future challenges and questions**

- **Regulatory**
 - ✓ Compatibility with LPIS (Reg 1593/00)
 - ✓ Interest of a VITI SIG regulation ?
- **Technical improvement**
 - Digital mapping and GIS
 - Use of ortho imagery
 - Updating / consolodation
 - Telematic and access to databases
 - ✓ Interest of common technical recommendations on VITI GIS ?
- **Enlargement**
 - ✓ Implementation of the Acquis communautaire by CC
 - Benefit from the experience of present MS
 - ✓ Use the best practices
- **Market situation**
 - ✓ Future trends ?



**1st WORKSHOP ON THE LAND PARCEL
IDENTIFICATION SYSTEM IN THE CONTEXT
OF THE VINEYARD GIS**

ISPRA, 6 and 7 November 2002

Thanks for your Attention !

*Josiane MASSON, Olivier LEO
IPSC, MARS Unit*





EUROPEAN COMMISSION
DIRECTORATE GENERAL JRC
JOINT RESEARCH CENTRE - ISPRA
Institute for Protection and Security of the Citizen
MARS Unit


Session 1 – Requirements for compatibility between IACS and Vineyard Register,
by *Simon Kay, MARS Unit (IPSC, JRC Ispra)*

Abstracts

Simon Kay first presented the basis and assumptions of the compatibility requirement. All 15 MS and 13 CCs are concerned by IACS regulation (Council) 3508/92, replaced by (Council) 1593/00 which makes the use of GIS for LPIS compulsory by 1/1/2005. There is no regulation obligation to use orthophotos but it is recommended because it is an extremely useful tool. In addition Art 10 of Reg 1593/00 stipulates that the administration and control systems of other schemes (including Vineyard) have to be compatible with IACS by 1st January 2003. The compatibility issue was addressed: it should be possible to cross-check, with at least transfers between systems or, much better, common functions systems. The main purpose of compatibility is to exclude from IACS areas which are already claimed under another scheme. S. Kay emphasised that when no common parcel reference system is used, these cross-checks cannot be achieved, which is the case for Vineyard Register at least for France, and maybe for Germany.

The second part of the presentation covered the requirements and main functions of the IACS Land Parcel Identification System, including a presentation of various land parcel references which can be encountered in the Member States (agricultural parcels, ilots, physical blocks, cadastre...).

(Presentation Powerpoint)


 LPIS compatibility requirements between the Vineyard Register and the IACS Slide 1


The Joint Research Centre

CAP Vineyard workshop, 6/7 Nov 2002

Land parcel identification system compatibility requirements between the Vineyard Register and the IACS

Simon Kay
Mars Unit, DG JRC


 Monitoring Agriculture with Remote-Sensing

 LPIS compatibility requirements between the Vineyard Register and the IACS Slide 2

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Outline

- **Compatibility: basis, assumptions**
- **Requirements & main functions of the IACS Land Parcel Identification System (LPIS)**

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Outline

- **Compatibility: basis, assumptions**
- **Requirements & main functions of the IACS Land Parcel Identification System (LPIS)**

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Arable land subsidies: Integrated Administration and Control System (IACS)

- **Regulations: Council 3508/92 (1593/00), Com. 2419/01**
- **Member States: 15 (+ 13 candidate countries)**
 - P, E, I, F, Gr, A, D, L, UK
 - CC's
- **Requirements: Register all Agricultural parcels:**
 - Management of application process
 - Control claims for subsidies and eligibility.
 - 100 % Administrative cross-checks
 - On the Spot (5% of dossiers)

⇒ **Compulsory GIS for 1.1.2005 - reg 1593/00**

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IACS, Reg 1593/00

- **Art 10: In Article 13(1) [of 3508/92], the following points shall be added:**
 - "(c) at the latest as from 1 January 2005 as regards the geographical part of the parcel identification system as provided for in Article 4;
 - (d) at the latest as from 1 January 2003 as regards the compatibility of the administration and control systems with the integrated system as provided for in Article 9a.; "
- **Art 11. The Annex attached to this Regulation shall be added [to 3508/92].**

Includes aspects of Vineyard register

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Compatibility of "geographical part of the parcel identification system"


- ⇒ **Concerning identification unit**
 - Vineyard mapping must be at least as detailed as the IACS LPIS adopted by the Member State
- ⇒ **With respect to GIS implementation**
 - Mapping of all parcels within Vineyard register by deadline
 - Availability of documents (or on-line systems) for declaration process required
- ⇒ **No regulation obligation to use orthophotos**


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 LPIS compatibility requirements between the Vineyard Register and the IACS Slide 7


 Compatibility of "the administration and control systems with the integrated system" Art 9a 3508/92


- ⇒ Requires cross checks between all parcel references
- ⇒ At least data transfer between systems
 - Preferably common function
- ⇒ Primary requirement is to avoid IACS claims for parcels in the Vineyard register
- ⇒ **Note: if no common parcel referencing is used, these administrative controls cannot be achieved**


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 LPIS compatibility requirements between the Vineyard Register and the IACS Slide 8


 Outline

- **Compatibility: basis, assumptions**
- **Requirements & main functions of the IACS Land Parcel Identification System (LPIS)**


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IACS - Main concepts

- ⇒ Each year, for each parcel under her management the farmer has to declare every agricultural parcel, i.e.
 - a continuous piece of land
 - with a single crop
 - cultivated by a single farmer (Article 7.4 Reg 3508/92)
- ⇒ However, the Commission Decision 2004/188/EC foresees the possible use of the following mechanisms:
 - Of simplification of parcels
 - Others than agricultural parcels
 - Production lots or plots
 - Of pre-existing agricultural parcels

REFORMS?

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Identification of agricultural parcels in IACS

Article 6.6 of 3508/92 stipulates the three main expected functions of the identification:

- ⇒ **Unambiguous referencing of the object**
 - a unique identity or number, managed in the GIS/Database
- ⇒ **Georeference or location**
- ⇒ **Metric parameters of the parcel**

What ?
Where ?
How much ?

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Administrative cross-checks in IACS (100%) between declared and reference parcels?

In practise, **reference parcels** have to be managed by the IACS

- ⇒ as **geographical objects**
- ⇒ with a number of **attributes** in a database:
 - ⇒ Gross cultivatable area,
 - ⇒ Type of land use (arable, forage, vineyard, etc),
 - ⇒ Eligibility,
 - ⇒ Applicant, holding
 - ⇒ other relevant information, slope, etc.

⇒ **Land Parcel Information System (LPIS)**

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Council Regulation 1593/00

- ⇒ **Makes migration of LPIS compulsory**
 - from alphanumeric system or hybrid (analogue) geographical approach
 - ⇒ To GIS integrating graphical and alphanumeric data

⇒ **Harmonise European LPISs, to a higher standard**

1st Jan 2005

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Information requirements for LPIS

- Up to date land use of parcels
- Link with Farmers and Holding (farm unit)
 - ⇒ *But not necessarily the owner*
- Unambiguous identification
- Reference areas of the parcels
- Type of land use of the parcels (eligibility)
- Coverage: rural area, regular system
 - ⇒ *National standard (projection)*
- Object: fields (parcels), but also in GIS?
 - ⇒ *Location of Farm buildings, Stables (Animals)*
 - ⇒ *Linear elements (hedges, walls,...)*
 - ⇒ *Trees, protected features inside agric.*

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Summary of LPIS management requirements

- Access to both alphanumeric & graphical data
- Distribute data to farmers
 - ⇒ *Cost considerations*
 - ⇒ *Copyright/data privacy issue*
- Complete GIS maintenance
- Link with IACS databases
 - ⇒ *+ with min. 3 years of archive*

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LPIS compatibility requirements between the Vineyard Register and the IACS

Slide 15

In terms of timing

- Fast implementation (1.1.2005)
- Regular updating (yearly)
- Ortho-photos ≤ 5 years
- Real-time cross checks (payment after control)

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LPIS compatibility requirements between the Vineyard Register and the IACS


Slide 16

Basic geometric requirements for IACS GIS

- Field boundary uncertainty: Between 0.5-1m
- Objects represented as linear if ≤ 2 m wide
- Mapping accuracy **better** than 1: 10 000
 - ⇒ **Absolute RMSE ≤ 2.5 m**
 - Relative RMSE ≤ 1 m?
 - ⇒ **Pixel orthophotos ≤ 1 m**

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 LPIS compatibility requirements between the Vineyard Register and the IACS Slide 17


Compatibility

Cross-check support of parcel identification

- ⇒ Objective: exclude from IACS areas already claimed under another scheme.

MS with issues to address?


- ⇒ F: new LPIS will not be based upon cadastre
- ⇒ D: cadastre only indirectly referenced by LPIS?


Maybe some adjustments?


- ⇒ A:
- ⇒ P:
- ⇒ L:
- ⇒ UK (minor): could integrate into RPA's RLR?

LPIS compatibility expected?

- ⇒ I, E, Gr,



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 LPIS compatibility requirements between the Vineyard Register and the IACS Slide 18


Issues

Management of geographical reference

- ⇒ Boundary definitions
- ⇒ Identification, margins
- ⇒ Areas
- ⇒ Projections, unified system


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Strategy

Identify in LPIS, attributes

- **Cadastral or equivalent management system in current use.**
 - Transitional approach until 1.1.2005

However, for different LPIS:

Agricultural parcel:

- **One to one match: requires boundaries of all vineyard parcels**

Ilot: (farmer-defined block)

- **Farmer defines area in ilot equal to vineyard**
- **Ilot declaration required for wine growers**

Block: (geographically defined)

- **Block declaration required for wine growers**

Clear preference for *migration to GIS in phase with IACS*

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LPIS Reference parcels In 2005 ?

Reference Parcels in 2005 LPIS	
Agric Parcel	(1)
Blocks FARMERS	(2)
Blocks PHYSICAL	(9)
Blocks PHYSICAL or FARMER	(1)
Cadastre	(4)
O. Survey	(1)

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LPIS in Candidate Countries ?

LPIS in Candidate countries
Orientations for Reference parcel

Blocks FARMERS	(2)
Blocks PHYSICAL	(3)
Blocks PHYSICAL and FARMERS	(2)
Cadastre	(4)
not decided	(2)

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Conclusions

Compatibility

- ⇒ Driven from both directions

Timing

- ⇒ Clearly stipulated in IACS regulations
- ⇒ Migration in phase with IACS strongly advised

Technical considerations

- ⇒ Data requirements of IACS generally a subset of Vineyard register (area, use, etc)
- ⇒ Technical approach is proven with IACS
- ⇒ Assessment of LPIS version is crucial for functional analysis and cost assessment

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Session 2: Presentation of the Vineyard Registers by Member State

Session 2 – Presentation of the Vineyard Register in France, by *Patrick Grondin*,
Ministry of Finance, DGDDI – F3

Abstract

M. Grondin is in charge of coordinating the French Vineyard Register (called 'CVI', i.e. 'Casier Viticole Informatisé') within the Bureau F3 (Contributions Indirectes) of the DGDDI (Direction Générale des Douanes et Droits Indirect) which belongs to the Ministère de l'Economie, des Finances et de l'Industrie and the Ministère du Budget et de la réforme budgétaire. First of all it should be highlighted that the management of subsidies scheme for vine and wine is under the responsibility of several administrations in France: the DGDDI, the INAO (in charge of registered designation of origin), the ONIVINS (payment agency) and the Ministry of Agriculture (MGA, Mission de Gestion des Aides). In addition the DGCCRF (Direction Générale du Contrôle de la Consommation et de la Répression des Fraudes) and the SCEES (Statistical Office of the Ministry of Agriculture) are also involved. Initially the Vineyard Register was created by the DGI (Direction Générale des Impôts) and then it was put under the responsibility of DGDDI.

*The CVI is a unique centralised database accessible by the administrations in charge (500 workstations) of which 50 Services de la Viticulture which are the real operators of the system. The CVI covers 185,000 wine growing holdings and 500,000 wine production installations, and **3.5 M cadastral parcels and 14 M sub-parcels**. The system is breakdown in 5 main parts:*

- *Part 1 for the management of holdings and wine producing entities.*
- *Part 2 for the management of land potential, which is of highest interest for this workshop. It covers the identification of cadastral parcels (link to DGI MAJIC2 database), data at the level of sub-parcels (area and vine-stock), as well as the management of grubbing, plantation (including the management of plantation rights), grafts.*

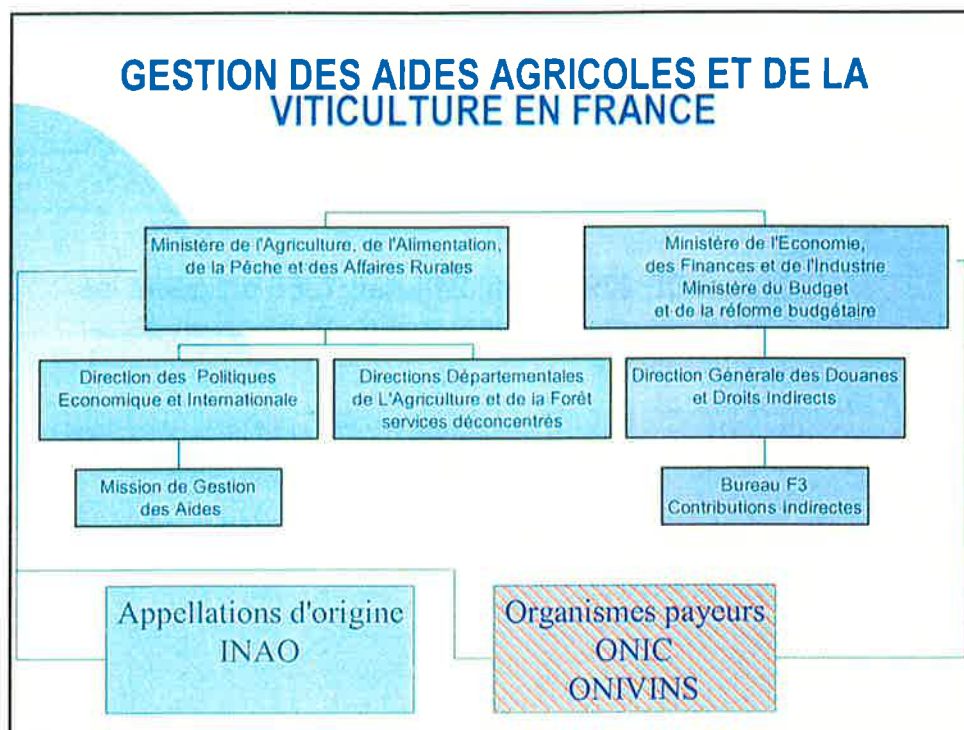


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- *Part 3 for the management of harvest and wine production (agreements managed by INAO or ONIVINS).*
- *Part 4 for the management of intervention measures (distillation, managed by ONIVINS).*
- *Part 5 for the statistics.*

M. Grondin stressed that the CVI can be considered as reliable; it could be improved, for example using a graphic system but this evolution is still not yet decided for the moment. Up to now the CVI was more oriented to management than control.

(Presentation Powerpoint)



Le Casier viticole informatisé

Patrick GRONDIN
DGDDI- bureau F/3

Bases juridiques

- Règlement CE 2392/86 du 24 juillet 1986 obligeant les EM possédant un vignoble à mettre en place un casier viticole informatisé
- Règlement CE 649/87 du 3 mars 1987 portant modalités d'application relatives à l'établissement du casier viticole communautaire

Structure à plusieurs intervenants

- **Deux ministères : Economie et Agriculture**
 - Direction générale des douanes APPARTIENT AU Ministère de l'Economie des Finances et de l'Industrie (MINEFI)
 - Direction générale des impôts appartient au MINEFI
 - Direction générale du contrôle de la consommation et de la répression des fraudes (DGCCRF) appartient au MINEFI
 - Service central des études et enquêtes statistiques (Ministère de l'agriculture- SCEES)
- **Deux établissements publics sous tutelle des deux ministères**
 - Institut National des appellations d'origine (INAO)
 - Office National interprofessionnel des vins (ONIVINS)

Fonctionnalité des intervenants

- DGDDI : Gestion des exploitations, du foncier, de la récolte et de la production
- DGCCRF : Traitements œnologiques
- DGI : Informations cadastrales
- SCEES : Informations statistiques
- INAO : gestion des VQPRD
- ONIVINS : gestion des vins de table et des distillations

Caractéristiques informatiques

- Base de données unique gérée par un système centralisé alimentée de manière transactionnelle par des informations saisies en temps réel ou selon une périodicité déterminée par un réseau d'environ 500 terminaux installés chez les différents intervenants.
- Chaque organisme reçoit les habilitations nécessaires à la gestion de son domaine

Contenu de la base de données

- 30 fichiers permanents : environ 15 Go
- 185 000 entreprises viti-vinicoles
- 500 000 installations vinicoles
- 3 500 000 parcelles cadastrales
- 14 000 000 de sous parcelles viticoles
- 600 aires d'appellation
- 600 cépages
- 3 000 produits
- 20 000 communes
- 560 000 droits de plantation

Composition du Casier Viticole Informatisé

- 5 composantes essentielles :
 - Gestion des intervenants : l'entreprise viti-vinicole et l'exploitant
 - Gestion du potentiel foncier
 - Gestion de la récolte et de la production
 - Gestion des mesures d'intervention
 - Productions statistiques

Gestion des intervenants

Entreprises viti-vinicoles (E.V.V)

identité des EVV, parcelles, installations

- Exploitations viticoles
- Exploitations viti-vinicoles
- Coopératives viti-vinicoles
- Acheteurs -vinificateurs
- Elaborateurs de produits dérivés
- Pépiniéristes viticoles
- Autres

Gestion des intervenants

Personnes physiques ou morales (PPM)

identité, liens avec les EVV

- Gestionnaires des E.V.V : Exploitants et producteurs
- Non Gestionnaires d 'E.VV : Bailleurs, acheteurs vinificateurs, détenteurs de droits

Gestion du potentiel foncier

- Identification des parcelles cadastrales viticoles et suivi de leur modification en liaison avec MAJIC2
- Suivi de l'évolution de l'exploitation : entrée et sortie des parcelles
- connaissance des sous-parcelles : superficie, encépagement (porte-greffe et cépage)
- Gestion des arrachages, plantations, greffages
- Gestion du portefeuille de droits de plantation
- Envoi d'une fiche de compte :
 - identification de l'EVV et de l'exploitant
 - installations vitivinicoles
 - parcelles
 - portefeuille de droits

Gestion de la récolte et de la production

- **OBJET:**
 - Saisie des déclarations de récolte, de production et de stock
 - Suivi des traitements œnologiques
 - Comparaison des informations du potentiel foncier, des EVV et des déclarations de récolte
- **DECLARATIONS (212.453 en 2001)**
 - simplifiée (non commercialisants environ 95 000)
 - normale (commercialisants)
 - caves coopératives
 - acheteurs -vinificateurs
 - N.B ; les déclarations sont préidentifiées avant l'envoi aux déclarants et saisies par les 50 services de viticulture

Gestion des mesures d'intervention

- Gestion des distillations (règlement 1493/99)
 - - prestations viniques (art 27)
 - - distillation vins double fin (art 28)
 - - distillation alcool de bouche (art 29)
 - - distillation de crise (art 30)
- Modalités de gestion
 - - calcul, édition et envoi des sous-produits à livrer
 - - modification possible par le service à l'écran
 - - apurement des dossiers à l'écran
 - - contrôle des conditions requises pour la délivrance de l'AROC par le système.

Productions statistiques

- **OBJET :**
 - - statistiques de récolte production, stockage
 - - statistiques relatives au potentiel viticole
 - - statistiques de distillation
 - - statistiques d'aides et de primes
 - - statistiques de traitements œnologiques
- **DESTINATAIRES**
 - - Commission des CE
 - - DGDDI
 - - Organismes associés
 - - Organismes professionnels

Conclusions

- Le CVI constitue la base de données la plus complète disponible dans le domaine viticole français
- le degré de fiabilité de ses informations pourrait être encore accrue et son efficacité renforcée par l'utilisation d'un référentiel commun à tous les utilisateurs.
- Le développement d'une passerelle entre une base graphique et la base de données existante peut être envisagée à condition de définir des paramètres communs à son utilisation.



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Session 2 – Presentation of the Vineyard Register in Spain, by *D. Jose Alvarez*,
Servicio del Registro viticola, MAPA

Abstract

M. Alvarez is in charge of the Vineyard Register in the Spanish Ministry of Agriculture (MAPA). His presentation was divided in 5 parts.

1. Implantation of the Vineyard Register: *the VR in Spain was implemented in 4 phases:*

- *Phase 1 covering 9 provinces and 67% of Spanish vineyard area (1989-93)*
- *Phase 2 covering 19 provinces and 23.3% of vineyard area (1991-95)*
- *Phase 3 covering 12 provinces and 5.9% of vineyard area (1995-97)*
- *Phase 4 covering 10 provinces and 3.6% of vineyard area (1997-2000)*

*Rustic cadastre was used initially and a total of 13.1 M cadastral parcels were digitised. Each vineyard parcel was field visited. In total **711,203 wine-growing holdings, 1.2 M ha and 2.33 M vineyard plots** were identified and registered in the VR. The average size of vineyard parcel in Spain is **0.53 ha**.*

2. Creation of the Vineyard GIS: *M. Alvarez presented the Vineyard GIS tool based on Arc/Info PC software. By superimposing rustic cadastre with orthophotos, a SUBPOLYGON layer was created. A link was made with the vineyard parcels of producers; each parcel has a graphic representation with a vineyard parcel folder signed by the vineyard producer.*

3. Vineyard Register update and management: *the VR is decentralised and the CCA (Autonomous Communities) are in charge of the sector management and VR updating. The consequence is a lack of uniformity from one CCA to the other and difficulties to handle geographic database. A new project started in 2000 to update VR according to current Rustic Cadastre and to integrate VR within the IACS (2 projects). To date 70% of the Rustic Cadastre is digital. A 'superposition rate' was calculated by topologic superposition between rustic cadastre and VR; the plots were adjusted using orthophotos. To date 80% vineyard area and 55% vineyard plots have been checked.*



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4. SIGPAC – GIS of Agricultural plots: *the SIGPAC is being created under reg. 1593/00; it will include all parcels declared for arable land scheme. For all the Spanish territory cadastral maps will be digitised, land parcels will be digitised using cadastre and orthophotos background plus field surveys. Several classes of land use have been defined for photo-interpretation, including vineyard and olive trees. The identification of parcels in SIGPAC will be based on cadastral references. SIGPAC will be linked to other existing GIS: Vineyard GIS, Olive GIS, Citrus GIS and Forest stocks. The information that will be shared between SIGPAC and Vineyard GIS are still to be defined. The SIGPAC will be accessible via Internet at national, CCA and regional level, with specific access rights. It will be updated with declarative information on a yearly basis.*

5. Application for the management of Vineyard register: *M. Alvarez introduced the demonstration of the software developed for the management and updating of VR, which was undertaken on 7/11/2002 by David Plaza Plaza.*

(Presentation Powerpoint)



M.A.P.A.

VINEYARD SPANISH REGISTER IMPLANTATION



M.A.P.A.

WORKS PLANNING

Vineyard register implantation works were planned on 4 phases which cover all national territory.

APPROACHES used to gradually include the difference provinces on the 4 scheduled phases were:

- ✓ Vineyard surfaces, provinces with the most extensive vineyard surfaces were included on initial phases.
- ✓ Performance costs, provinces with least performance costs were included on initial phases.



M.A.P.A.

PHASE 1



% VINEYARD SURFACES

Ciudad Real	18.3
Toledo	14.2
Cuenca	8.9
Albacete	8.6
Valencia	5.4
Tarragona	2.8
Huelva	0.8
Badajoz	6.8
Zamora	1.4

PERIOD:1.989/1.993

TOTAL 67.2



M.A.P.A.

PHASE 2



% VINEYARD SURFACES

Alicante	2.5
Avila	0.6
Barcelona	4.8
Burgos	0.9
Caceres	0.3
Castellon	0.1
Cordoba	1.2
Granada	0.4
Guadalajara	0.2
Huesca	0.3
Leon	0.1
Logrono	1.7
Madrid	4.6
Malaga	0.2
Murcia	3.6
Rioja	3.0
Valladolid	1.9
Zamora	3.5

PERIOD:1.991/1.995

TOTAL 23.3



M.A.P.A.

PHASE 3



PERIOD:1.995/1.997

% VINEYARD SURFACES

Almería	0.16
Álava	0.86
Cádiz	0.89
Girona	0.25
Lleida	0.34
Ourense	0.93
Palencia	0.08
Salamanca	0.34
Segovia	0.13
Sevilla	0.21
Soria	0.11
Navarra	1.58

TOTAL 5.9



M.A.P.A.

PHASE 4



PERIOD:1.997/2.000

% VINEYARD SURFACES

Asturias	0.08
I. Balears	0.11
Cantabria	0.003
A Coruña	0.19
Las Palmas	0.29
Pontevedra	1.26
Sta. Cruz	1.32
Teruel	0.38
Vizcaya	0.01
Guipúzcoa	0.007

TOTAL 3.60

ACHIEVED

WORKS

USED INFORMATION

✓ VINEYARD CADASTRE. YEARS 1.972/1.985

✓ RUSTIC CADASTRE:

- Copy on paper from existent plans
- Fotogrametric restoration for not existent



✓ 1/20.000 FOTOGRAMETRIC FLIGHT





M.A.P.A.

FIELDWORKS

- ✓ To identify and localize each vineyard plots by means of visits.
- ✓ To take agronomy features of growing.
- ✓ To identify over cadastral cartography
- ✓ To investigate about ownership and title deed
- ✓ To show picked dates up publicly to be confirmed by winegrowers.



M.A.P.A.

WORKS ON NUMBERS

Phases	Number of provinces	Performance Period	Vineyard surface		Growing Intensity (Ha)	Vineyard Plot		Average Plots (Ha)
			(Ha)	(%)		Number	(%)	
1*	9	1989/1993	829.994	67,19	15,08	817.239	35,00	1,02
2*	19	1991/1995	288.190	23,33	5,44	581.222	24,88	0,50
3*	12	1995/1997	72.847	5,89	3,21	361.978	15,49	0,20
4*	10	1997/2000	44.223	3,59	6,09	575.138	24,63	0,06
TOTAL	50	1989/2000	1.235.254	100,00	8,85	2.335.577	100,00	0,59



M.A.P.A.

WORKS ON NUMBERS

Provinces number (all with vineyards)	50
Number of towns in Spain	8.200
Number of towns with vineyards in Spain	4.128
Flights maden on Spain (ha)	25.232.000
Digitalized area (ha)	10.250.000
Number of digitalized cadastral plots	13.100.000
Cadastral maps used	38.600
Vineyard area registered (ha)	1.235.254
Number of vineyard plots registered	2.335.577
Number of winegrowing plots	711.203
Growing intensity	8,95%
Average size of vineyard plots (ha)	0,53



M.A.P.A.

VINEYARD GIS CREATION



M.A.P.A.

INFORMATIC TOOLS

✓ *GRAPHICS DATAS*

Arc / Info PC Program

Geographic Information System

✓ *ALPHANUMERIC DATAS*

DBASE Program

Our own application developed by CLIPPER



M.A.P.A.

GRÁPHICS DATA

From:

Ortophotos



Primary Network

Rustic Maps



Secondary Network
(plot)



**SUBPOLYGON
COVER**



M.A.P.A.

GRÁPHICS DATA

Subpolygon cover **COMPONENTS:**

LINES

They are codified with administrative and geographic codes

Ejem. Sid=6300 Plot and track limit

6000=Plot 300=Track

LABELS

Cadastral references, fields identification and surfaces estimation



M.A.P.A.

ALPHANUMÉRIC DATA

H1 Tokens



Plots
(*PAR.DBF*)

Agronomic
features of vineyard
plots

H2 Tokens



People
(*PER.DBF*)

Winegrower and
plots owners data



M.A.P.A.

AUXILIARY TABLES

TMUNI.DBF



Towns table. Codes and all spanish towns names are included.

TVARI.DBF



Vineyard variety table. Codes and names of all the vineyard varieties located in Spain are included.

TZONA.DBF



Production areas table. Codification for the different production areas in Spain are included.

TDEST.DBF



Production bound table. Several production bounds are established.

TPJ.DBF



Graftbearer. Code and names of all graftbearer in Spain are included.



M.A.P.A.

GRAPHIC AND ALPHANUMERIC DATA RELATIONSHIP

LABS

PLOTS

PEOPLE



M.A.P.A.

ALPHANUMERIC DATA - AUXILIARY TABLES RELATIONSHIPS

TZONA

PARCELAS

TDEST

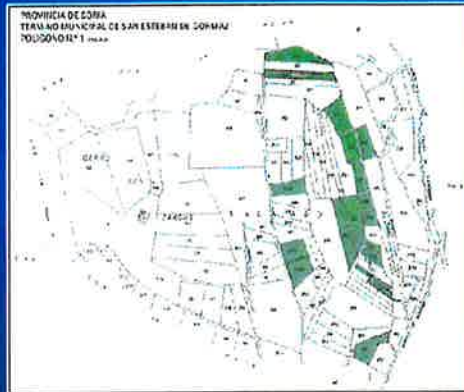




M.A.P.A.

PRODUCTS

"A" Token



"E" Token

Drawed plans



M.A.P.A.

VINEYARD REGISTER UPDATE AND MANAGEMENT



M.A.P.A.

MANAGEMENT AND UPDATE RESPONSIBILITIES



Autonomic Communities
take charge of vineyard
register management and
update



M.A.P.A.

MANAGEMENT AND UPDATE RESPONSIBILITIES

Autonomic Communities activities:



SECTOR MANAGEMENT

- ✓ To pull up licenses
- ✓ To manage rights reserved
- ✓ To approve plantations
- ✓ Control schemes
- ✓ Restructuring schemes

REGISTER UPDATE

- ✓ As a result from register updating
- ✓ Database updating



M.A.P.A.

MANAGEMENT AND UPDATE RESPONSIBILITIES

The Autonomic Communities activities causes:



ALPHANUMERIC MODIFICATIONS

GRAPHICS MODIFICATIONS



M.A.P.A.

PROBLEMS AND NECESSITIES DERIVED FROM MANAGEMENT

- ✓ Evenness lack on register management
- ✓ Difficulties on handling informatic graphic database
- ✓ To integrate Register graphic database with current digital Rustic Cadastre
- ✓ To integrate Register information with Integrated Manage System and Community Aids Control.



M.A.P.A.

UPDATE WORKS

A new project to update Register database and fit it to Rustic Cadastre's current cartography started on 2.000 by Central Governments



M.A.P.A.

UPDATE WORKS

TARGETS:

To integrate Vineyard Register with Rustic Cadastre's current digital cartography

To link Register's graphic database with LPIS (Agricultural Parcels Information System)



M.A.P.A.

INFORMATIC TOOLS

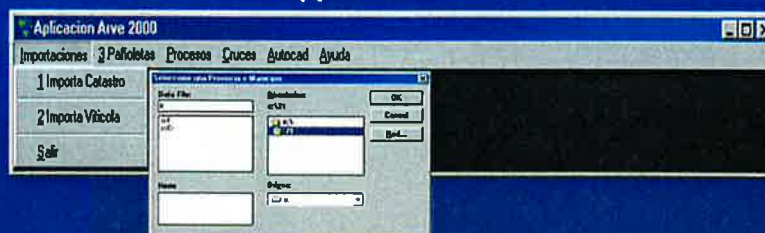
✓ GRAPHIC DATA

Geographic Information System

Previous works

Arc / Info PC

Own Applications





M.A.P.A.

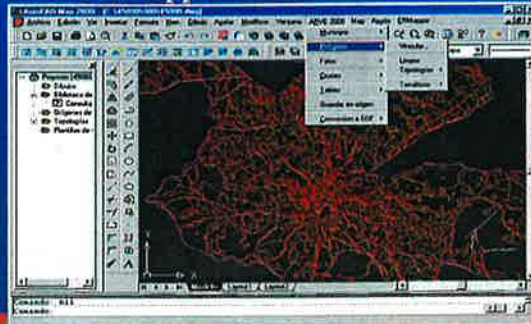
INFORMATIC TOOLS

✓ GRAPHIC DATA

Edition works on screen

Autocad Map 2000

Own Applications



M.A.P.A.

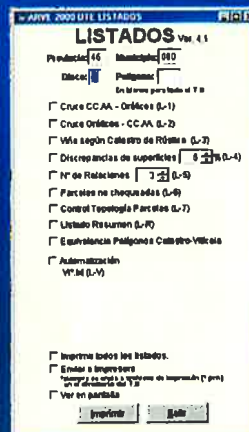
INFORMATIC TOOLS

✓ ALPHANUMERIC DATA

Visual Fox pro

Visual Basic

Own Applications





M.A.P.A.

USED INFORMATION



Rustic
Cadastré's digital
cartography

Vineyard
Register's digital
cartography



M.A.P.A.

USED INFORMATION



Digital ortophoto

Parcela	Parcela	Parcela	Parcela	Parcela	Parcela
1001	1002	1003	1004	1005	1006
1007	1008	1009	1010	1011	1012
1013	1014	1015	1016	1017	1018
1019	1020	1021	1022	1023	1024
1025	1026	1027	1028	1029	1030
1031	1032	1033	1034	1035	1036
1037	1038	1039	1040	1041	1042
1043	1044	1045	1046	1047	1048
1049	1050	1051	1052	1053	1054
1055	1056	1057	1058	1059	1060
1061	1062	1063	1064	1065	1066
1067	1068	1069	1070	1071	1072
1073	1074	1075	1076	1077	1078
1079	1080	1081	1082	1083	1084
1085	1086	1087	1088	1089	1090
1091	1092	1093	1094	1095	1096
1097	1098	1099	1100	1101	1102
1103	1104	1105	1106	1107	1108
1109	1110	1111	1112	1113	1114
1115	1116	1117	1118	1119	1120

Alphanumeric Database
Vineyard Register



M.A.P.A.

TOPOLOGIC SUPERPOSITION

Rustic C.
+
Vineyard R.

CPo	CPar	CSu	VPo	VPar	VSu	Fecha	Rel
1000	100010	0	1000	100010	0		AL
1000	100015	0	1000	100015	0		AL
1000	100020	0	1000	100020	0		AL
1000	100025	0	1000	100025	0		AL
1000	100030	0	1000	100030	0		AL
1000	100035	0	1000	100035	0		AL
1000	100040	0	1000	100040	0		AL
1000	100045	0	1000	100045	0		AL
1000	100050	0	1000	100050	0		AL
1000	100055	0	1000	100055	0		AL
1000	100060	0	1000	100060	0		AL
1000	100065	0	1000	100065	0		AL
1000	100070	0	1000	100070	0		AL
1000	100075	0	1000	100075	0		AL
1000	100080	0	1000	100080	0		AL
1000	100085	0	1000	100085	0		AL
1000	100090	0	1000	100090	0		AL
1000	100095	0	1000	100095	0		AL
1000	100100	0	1000	100100	0		AL
1000	100105	0	1000	100105	0		AL
1000	100110	0	1000	100110	0		AL
1000	100115	0	1000	100115	0		AL
1000	100120	0	1000	100120	0		AL
1000	100125	0	1000	100125	0		AL
1000	100130	0	1000	100130	0		AL
1000	100135	0	1000	100135	0		AL
1000	100140	0	1000	100140	0		AL
1000	100145	0	1000	100145	0		AL
1000	100150	0	1000	100150	0		AL
1000	100155	0	1000	100155	0		AL
1000	100160	0	1000	100160	0		AL
1000	100165	0	1000	100165	0		AL
1000	100170	0	1000	100170	0		AL
1000	100175	0	1000	100175	0		AL
1000	100180	0	1000	100180	0		AL
1000	100185	0	1000	100185	0		AL
1000	100190	0	1000	100190	0		AL
1000	100195	0	1000	100195	0		AL
1000	100200	0	1000	100200	0		AL

Buscar Catastro Buscar Viteola
Cambiar Poligono Actualizar
 Ver todos Sin confirmar



M.A.P.A.

WORK METHODOLOGY

- ✓ To confirm one by one all relationships proposed by topologic superposition.
- ✓ To fit cartography on a modifications layer.
- ✓ Photo-interpretation of Vineyard plot not including on the Vineyard Register





M.A.P.A.

OUTCOME WORKS

Relationship tables

Comarca	Parcela	Parcela	Parcela	Parcela	Parcela	Parcela	Parcela	Parcela
1	1001	1002	1003	1004	1005	1006	1007	1008
2	2001	2002	2003	2004	2005	2006	2007	2008
3	3001	3002	3003	3004	3005	3006	3007	3008
4	4001	4002	4003	4004	4005	4006	4007	4008
5	5001	5002	5003	5004	5005	5006	5007	5008
6	6001	6002	6003	6004	6005	6006	6007	6008
7	7001	7002	7003	7004	7005	7006	7007	7008
8	8001	8002	8003	8004	8005	8006	8007	8008
9	9001	9002	9003	9004	9005	9006	9007	9008
10	10001	10002	10003	10004	10005	10006	10007	10008



Gis conformed to Rustic Cadastre



M.A.P.A.

WORKS IN PROGRESS


PHASE	Performance	Provinces	Vineyard areas		Vineyard plots	
	schedule	number	(Ha)	%	Nº	%
1ª	2000-2002	10	859.158	69,5	905.814	38,8
2ª	2002-2003	15	142.046	11,5	409.906	17,5

GEOGRAPHIC INFORMATION SYSTEM OF AGRICULTURAL PLOTS - SIGPAC

 1593/2000 (CE) Regulation
OBLIGES TO CREATE







Agricultural plots Identified Digital Graphic System,
by informatic tools of geographic Information


January 1st 2005







ADVISES

- To use ortopictures (by air or spatial)
- To specify its Geographic Information System (SIG) as way that allow ortopictures combined use on the future

 **Targets**   MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACION  GOBIERNO DE ESPAÑA SECRETARÍA DE ESTADO DE ADMINISTRACIÓN REGIONAL

TARGETS

- To provide request submission to farmers helping them to identify their plot over ortopicture (topographic maps and ortopictures are displayed on a screen)
- To expedite administrative supervise solving some doubts without plot visits.
- To provide supervise on the spot speeding up plot locations.

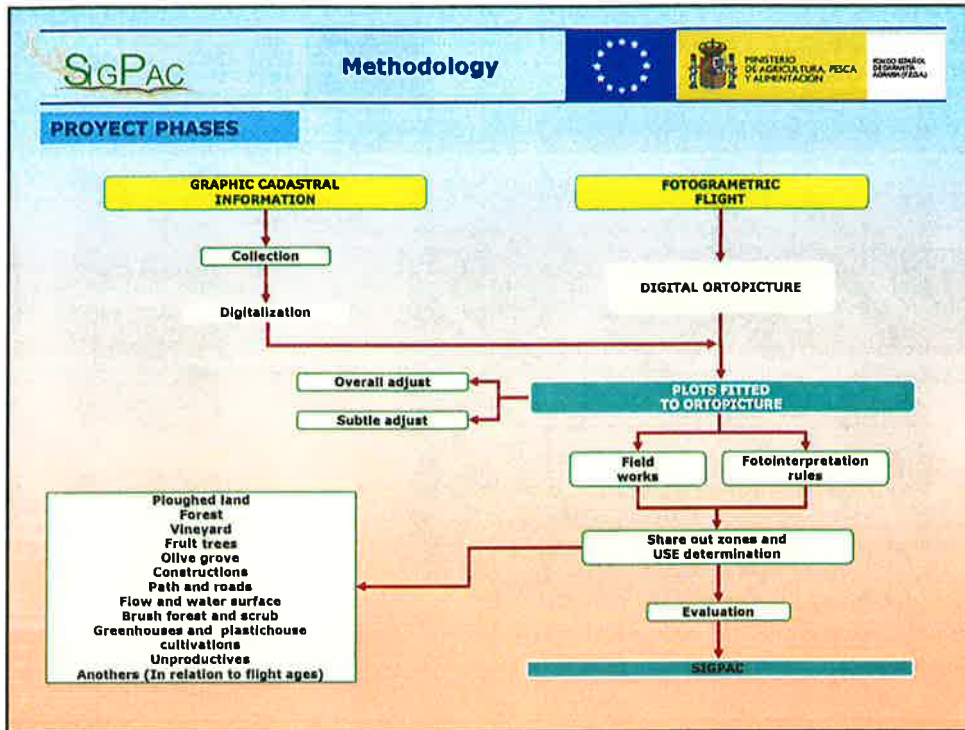
 **Targets**   MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACION  GOBIERNO DE ESPAÑA SECRETARÍA DE ESTADO DE ADMINISTRACIÓN REGIONAL

Designed project

Create national territory **GEOGRAPHIC INFORMATION SYSTEM (SIGPAC)** which enables geographic identification plots declared on any help system related with surface.

DIGITAL ORTOPHOTO MOSAIC will be included so, for each cadastral reference, the system supplies automatically applied plot picture on the screen, allowing:

- To be print o paper.
- To make a sketch on the screen.
- To keep the information (sketch) on digital format
- Etc.



SIGPAC Methodology

ORTOPICTURE, PLOT AND SHARE OUT ZONES

FRUIT TREES

PLOUGHED LAND

- Digital ortopicture
- Cadaster digitalisation and superposition
- Plots limit subtle adjusts
- Share out zones
- Use determination

ASSISTED PHOTOINTERPRETATION



VINEYARD SIG



FOREST STOCK



CITRUS SIG



SIGPAC CONTENTS

GRAPHIC INFORMATION



SIGPAC: Zones, measured and evaluated area, share out.



CADASTRE: Plot and underplot, alphanumeric area, dry/Irrigated, Cadastral used



Olive SIG : Olive grove area, olive trees number






Vineyard SIG



Citrus SIG



Topographic maps

SIGPAC **Methodology**   MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACION 

SIGPAC CONTENTS **ALPHANUMERIC INFORMATION**

SIGPAC DATA:

- SIGPAC Index (similar to Cadaster's reference), use or regular exploitation and fotointerpretation incidences.
- Measured, evaluated area and SIGPAC plot perimeter
- Irrigated rate and scrub rate.

CADASTRE DATA




- Identificative reference and plots - underplots cadastral use.
- Plots and underplots surfaces.

OLIVE SIG DATA

- Total olive trees and subsidy olive trees number.



VINEYARD AND CITRICAL GIS DATA

- To determinate

SIGPAC **Methodology**   MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACION 



INFORMATIC TOOLS TO DEVELOP:

- **TO VISUALIZE GRAPHIC INFORMATION LAYERS AND TO DESIGN AND PRINT, admittance stage adapted to different kind of users:**
 - National level: To consult and modify SIGPAC graphic and alphanumeric Information
 - Autonomic central unit level: To consult and modify SIGPAC, allowed to incorporate allegations and discrepancy results.
 - Regional level: To consult SIGPAC and transfer proposed changes to suitable regional authority to improve the system.

SIGPAC **Methodology**   INFORMACIÓN AGROPECUARIA

INFORMATIC TOOLS TO DEVELOP:

- TO EXTRACT SIGPAC PLOT DATA**
 To allow Autonomic Communities extract SIGPAC Plots Information automatically, and Integrate It on management and aids control databases to be crossed with plot Informations declared by farmers.
- TO SIGPAC MAINTENANCE**
 To allow, by Internet, change SIGPAC plot information as a result from controls and administrative actions belonging to this system management by appropriate authorities.

SIGPAC **Methodology**   INFORMACIÓN AGROPECUARIA


Sketches:

SIGPAC SOLICITUDES DE AYUDA A CULTIVOS HERRÁCEOS. CAMPAÑA 2003/2004 (COSECHA 2003) CROQUIS A EFECTOS DE LOCALIZACIÓN DE PARCELAS AGRÍCOLAS

DATOS IDENTIFICATIVOS DE RECINTO SIGPAC		FECHA SISTEMA
Provincia: Merida (M)	Municipio: Cabeza	Cód. INECAT: 015017
Polígono: 5	Parcela: 10	Relefo: 1
Agregado: 0		Zona: 0

Ortofoto y Parcelario Superpuesto. Recintos Numerados

PARCELA AGRÍCOLA IDENTIFICADA POR EL RAYADO Escala Aprox.



DATOS DE LA PARCELA AGRÍCOLA	Nº GRUPO	CULTIVO
DATOS DEL PRODUCTOR		
Código de la parcela		
Fecha y Firma		
Apellidos y Nombre o Razón Social:		
- Campo - ID Parcela (SIGPAC)		
- ID Parcela - ID Parcela Agrícola		

CIF/NIF:



M.A.P.A.

APPLICATION FOR THE MANAGEMENT OF VINEYARD REGISTER



M.A.P.A.

MAIN GOALS

*Development and Implantation Software for
the Management and updating of Vineyard
Spanish Register data bases*

- ✓ *Alphanumeric data bases Processing Module.*
- ✓ *Graphical data bases Processing Module.*
- ✓ *Management Module of Nacional-Regional Rights of
Plantation, Replantation or New Plantation*
- ✓ *Rights Transference Management Module.*
- ✓ *Training Courses and Guidelines.*



M.A.P.A.

Application

Update Alphanumeric
and graphical element

VRVE

Usuario

Contraseña

Vista Parcela

Prov/Mun. Polig. Parc. Subp. Explot. Propiet.

Var. 1	%	Descripción
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Año Plantedón Forma

B. Cultivos B. Vñedo % Rbo. (Om-A)

Marco Fila Cola Densidad

Vías

Cubros

Tipo Riego

Construcción

Porta/Layer/B

Vista Parcela

Subparcela

Cód. Apellidos Nombre

Subparcela Plantedón

Compañía Proceso Número Plan Rbo. Fecha

Derechos

Prov. Mun.	Polig.	Parc.	Subp.	Sup. m2	Sup. Disponible	Fecha Obtención	Cobertura en Campesin	Plan Rbo.
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Plantaciones Proyectadas

Prov. Mun.	Polig.	Parc.	Subp.	Sup. m2	% Variedad	Dest. Censal	Fa. R. Zona RD
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Anulación
 Transferencia
 Adquisición C.A.
 Cultivo
 Cultivo
 Explot. Suelo
 Explot. Suelo
 No Registrado

Nuevas Características

Provincia

Nuevo Parc.

Vista Parcela



EUROPEAN COMMISSION
DIRECTORATE GENERAL JRC
JOINT RESEARCH CENTRE - ISPRA
Institute for Protection and Security of the Citizen
MARS Unit

**Session 2 – Presentation of the Vineyard Register in Italy, by Maurizio Piomponi,
AGEA**

Abstract

*The creation of the Italian Vineyard Register started in 1987, using first manual methodology (i.e. manual superimposition of paper cadastral maps with aerial photos print outs). Then digital methodology was introduced during 1990-96 period and finally a **multi-sector GIS** (i.e. integrating several subsidies schemes) was set up in 1996-2000 with the updating of vineyard register, the olive GIS, the control of arable land scheme and the accompanying measures (rural development). Now there is a unique database at national level, composed of 2 common layers (orthophotos and cadastre layers) and thematic layers. The full territory is covered by 300,000 digital cadastre maps (corresponding to 70 M cadastral parcels) and orthophotos which are regularly updated (each 3-year). The Vineyard thematic layer contains **2,716,000 vineyard plots** covering 726,000 ha (the average size per plot is 0.27 ha). The census ("inventaire") of vine potential (Reg.(CE) 1493/99) was completed in November 1999, through agreement AGEA/regions. It was found 792,440 ha of vineyard (more than in VR) and 42,785 ha of new plantation. The planting rights are managed at regional level and compiled in the National register of planting rights. An updating campaign (of inventory, VR and graphic database) was carried out, on declaration basis (March 2001) and implementation of database and GIS application in 131 AGEA offices and 417 computers to collect the data. On this declaration basis 458,716 vine holdings were found, covering 642,672 ha. Before closing his presentation M. Piomperi showed examples of the GIS Web application. He emphasised that the GIS is now really integrated in Italy, with a decentralised management of potential of production. It is used both for management and control purposes.*

(Presentation Powerpoint)



Il GIS Viticolo

Ispra, 6-7 novembre 2002

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Il GIS Viticolo

I RIFERIMENTI NORMATIVI

- Reg. CEE 2392/86 Istituzione dello Schedario Viticolo
- Reg. CEE 649/87 Attuazione dello Schedario Viticolo
- Delibera AGEA n.518/98 Dichiarazione delle superfici vitate
- Reg. CE 1493/99 O.C.M. settore vitivinicolo
- DM 29/10/99 Realizzazione dell'Inventario del Potenziale Produttivo
- DM 27/03/2001 Finalità della dichiarazione delle superfici

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LA REALIZZAZIONE DELLO SCHEDARIO E DEL GIS

- '87-'90 Metodologia manuale
 - Ingrandimenti fotografici cartacei
 - Copia delle mappe catastali
 - Sovrapposizione manuale
- '90-'96 Prime applicazioni digitali
 - Scannerizzazione foto aeree e mappe catastali
 - Sovrapposizione digitale
- '96-2000 GIS multisetoriale
 - Aggiornamento schedari viticolo e oleicolo
 - Controlli PAC seminativi
 - Misure complementari (sviluppo rurale)

IL GIS ASSICURA

- Realizzazione di una unica base dati grafica digitale a livello nazionale costituita da:
 - ORTOFOTO immagini del territorio
 - CATASTO rappresentazione cartografica del territorio
 - TEMATISMI identificazione delle colture
- Realizzazione di un sistema informativo geografico (GIS) centralizzato di gestione di tutti i dati grafici, integrato nel sistema informativo di gestione dei dati delle domande di aiuto dei vari settori
- Una rilevazione aerofotogrammetrica effettuata con criteri identici per tutti i settori produttivi e con una elevata precisione geometrica

I VALORI DEL GIS

- Territorio Nazionale 300.000 Km^q
- 20 Regioni 15.000 Km^q
- 106 Province 2.830 Km^q
- 8.100 Comuni 37 Km^q
- 300.000 Mappe Catastali 1 Km^q
- 70.000.000 Particelle catastali 4.300 mq



- Superficie vitata (ettari) 726.000
- Vigneti rilevati 2.716.000

LA REALIZZAZIONE DELL'INVENTARIO DEL POTENZIALE VITICOLO (Reg.CE 1493/99)

- Stipula delle Convenzioni AGEA-Regioni (novembre'99)
- Messa a disposizione dei dati AGEA
 - Superfici vitate GIS
 - Superfici delle dichiarazioni annuali di raccolta delle uve
- Dati ISTAT
- Dati Catasto terreni nazionale
- Dati amministrativi regionali (estirpazioni e nuovi impianti)
- Comunicazione (effettuata il 31 luglio 2000) dei dati relativi al primo Inventario riferito alla data del 1 settembre 1999.
- Presa d'atto da parte della Commissione (12 giugno 2001)

INVENTARIO POTENZIALE AL 1 settembre 1999

Regione	Superficie vitata (ha) Tab. 6.2			Diritti disponibili (ha) Tab.7.2		Totale
	V.q.p.r.d.	Vini da tavola	Totale	Nuovi impianti	Reimpianti	
Piemonte	39.753	13.251	53.003	1.266	1.427	55.717
Valle d'Aosta	146	462	609	5	39	653
Lombardia	17.908	6.637	24.543	400	1.704	26.647
Veneto	33.902	39.500	73.402	430	2.441	76.273
Friuli - Venezia Giulia	13.920	5.578	19.498	145	893	20.536
Liguria	645	4.181	4.826	14	99	4.938
Emilia-Romagna	23.089	39.016	62.105	284	2.432	64.820
Toscana	33.094	31.346	64.440	1.373	1.465	67.268
Umbria	5.870	10.144	15.814	541	1.064	17.419
Marche	9.314	12.421	21.735	705	899	23.339
Lazio	15.585	29.363	44.948	252	824	46.024
Abruzzo	13.738	21.950	35.688	119	1.495	37.300
Molise	1.000	7.381	8.381	184	60	8.625
Campania	4.131	32.234	36.365	781	-	37.146
Puglia	19.910	91.160	111.070	39	3.999	115.108
Basilicata	1.774	7.270	9.043	-	-	9.043
Calabria	-	18.519	18.519	82	174	18.735
Sicilia	9.532	126.889	136.421	280	21.955	158.656
Sardegna	8.300	29.600	37.900	86	1.500	39.486
Prov.aut.Bolzano	4.932	-	4.932	-	141	5.073
Prov.aut.Trento	7.479	1.721	9.200	100	154	9.454
Totale (ha)	283.817	528.623	792.440	7.085	42.785	842.310

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AGGIORNAMENTO DELL'INVENTARIO DEL POTENZIALE VITICOLO (Reg.CE 1493/99)

- Dichiarazione superfici vitate (DM 27/3/2001) con finalità di:
 - Tenuta e aggiornamento dello Schedario viticolo
 - Tenuta e aggiornamento dell'Inventario del Potenziale
 - Aggiornamento delle iscrizioni agli Albi D.O. e I.G.T.
 - Tenuta e aggiornamento del sistema informativo grafico
- L'apertura da parte di AGEA di sportelli informatizzati per la compilazione assistita della dichiarazione
 - Apertura dal febbraio 2000 al gennaio 2002

AGGIORNAMENTO DELL'INVENTARIO NAZIONALE DEL POTENZIALE VITICOLO




AGGIORNAMENTO DELL'INVENTARIO DEL POTENZIALE VITICOLO (Reg.CE 1493/99)

DICHIARAZIONI DELLE SUPERFICI VITATE PRESENTATE				
	Numero	Superficie (ha)	di cui iscritta DO (ha)	di cui iscritta IGT (ha)
TOTALE GENERALE al 15 ottobre 2002	458.716	642.672,9652	168.062,3359	130.498,1735

Il GIS Viticolo

ELENCO SPORTELLI AGEA

Regione - Provincia	num. sedi	postazioni di lavoro
LAZIO	9	19
VENETO	14	50
LOMBARDIA	11	26
FRIULI	4	10
LIGURIA	4	8
EMILIA ROMAGNA	14	39
TOSCANA	10	29
UMBRIA	4	12
MARCHE	4	10
ABRUZZO	6	26
MOLISE	3	6
CAMPANIA	6	28
PUGLIA	10	43
BASILICATA	2	5
CALABRIA	5	11
SICILIA	21	82
SARDEGNA	4	13
TOTALE GENERALE	131	417

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Il GIS Viticolo

ELENCO SPORTELLI AGEA VENETO

Provincia	Comune	num. sedi	postazioni di lavoro
VERONA	BARDOLINO	1	4
VERONA	S.PIETRO IN CARIANO	1	5
VERONA	SOAVE	1	4
VICENZA	LONIGO	1	3
VICENZA	MONTECCHIO MAGGIORE	1	4
TREVISO	ODERZO	1	5
TREVISO	SUSEGANA	1	5
TREVISO	RONCADE	1	2
TREVISO	VALDOBBIADENE	1	5
VENEZIA	PRAMAGGIORE	1	4
VENEZIA	VENEZIA	1	1
PADOVA	CONSELVE	1	4
PADOVA	TORREGLIA	1	3
ROVIGO	ROVIGO	1	1
		14	50

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OBIETTIVI DI UTILIZZO NEI CONTROLLI

- **Struttura delle aziende**
 - **Procedure di impianto / reimpianto dei vigneti**
 - **Estirpazione e rilascio dei conseguenti diritti**
- **Misure strutturali**
 - **Domande di ristrutturazione/riconversione vigneti**
 - **Abbandono definitivo**
 - **Sviluppo rurale**
 - **PAC (seminativi, tabacco, zootecnia)**
- **Misure di mercato**
 - **Arricchimento vini**
 - **Magazzinaggio prodotti vinicoli**
 - **Distillazioni**

LA GESTIONE DECENTRATA DEL POTENZIALE VITICOLO

Realizzazione di un progetto tecnico su rete (Sistema Integrato di Gestione e Controllo del settore Vitivinicolo), pienamente rispondente alle esigenze della Amministrazione centrale e locale.

- **Utilizzo di risorse già disponibili all'Amministrazione (circa 1.000 punti di accesso sul territorio della rete SIM e rete Latte)**
- **Interconnessione con le altre Amministrazioni coinvolte nella gestione del settore (Regioni, ICRF, ecc.)**
- **Fruizione delle informazioni on-line**
- **Elevati standard di sicurezza (controllo degli accessi, tracciatura degli aggiornamenti, ecc.)**
- **Monitoraggio continuo e costante delle attività svolte**

GisWeb [Base dati: Remota - Mappe: Remoto - Foto: Remoto]

File Impostazioni Visualizzazione Utilità Estensioni Edizione ?

C.N. F402 052014 MONTALCINO Foglio 64 Part.

Versione limiti particella
 Versione tematismo

Settore: ND DataLav: Fonte:
 Settore: ND DataLav: Fonte:

100 mt Scale 1: 1500
 X= 1702966.2 Y= 4771387.54

Pronto Vicolo 30/10/2002

GisWeb [Base dati: Remota - Mappe: Remoto - Foto: Remoto]

File Impostazioni Visualizzazione Utilità Estensioni Edizione ?

C.N. F402 052014 MONTALCINO Foglio 64 Part.

Versione limiti particella
 Versione tematismo

Settore: ND DataLav: Fonte:
 Settore: ND DataLav: Fonte:

1 km Scale 1: 11100
 X= 1704966.66 Y= 4772615.99

Pronto Vicolo 30/10/2002

GisWeb [Basedati:Remota - Mappe:Remoto - Foto:Remoto]

File Impostazioni Visualizzazione Utilità Estensioni Editazione ?

Limiti particella
 Immatricolazione

C.N. F402	052014 MONTALCINO	Foglio 64	Part. 115
Settore: Vicolo	DataLav: 03/10/2001 10:47:34	Fonte: GIS	
Settore: Vicolo	DataLav: 03/10/2001 10:47:34	Fonte: GIS	

100 mt Scala 1: 1500
 X= 1702975.51 Y= 4771367.14
 Area particella 560 (mq)

Pronto Vicolo 30/10/2002

GisWeb [Basedati:Remota - Mappe:Remoto - Foto:Remoto]

File Impostazioni Visualizzazione Utilità Estensioni Editazione ?

Limiti particella
 Immatricolazione

C.N. F402	052014 MONTALCINO	Foglio 64	Part. 44
Settore: Obicolo	DataLav: 21/10/2002 18:15:22	Fonte: GIS	
Settore: Vicolo	DataLav: 03/10/2001 10:47:34	Fonte: GIS	

100 mt Scala 1: 1500
 X= 1703209.01 Y= 4771364.94
 Area particella 21289 (mq)

Pronto Vicolo 30/10/2002


Il GIS Viticolo

Esempi del sw on-line ...



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GisWeb [Basedati:Remota - Mappe:Remoto - Foto:Remoto]


File Impostazioni Visualizzazione Utilità Estensioni Edizione ?



C.M. F402 052014 MONTALCINO Foglio 64 P.01


	Settore: ND	DataLav:	Fonte:
	Settore: ND	DataLav:	Fonte:





Versione limiti particella
Versione tematismo

100 mt Scale 1: 1500
X= 1703204.23 Y= 4771220.81

Pronto Viticolo 30/10/2002 

LA GESTIONE DECENTRATA DEL POTENZIALE VITICOLO

Funzionalità disponibili:

- **Gestione dei fascicoli aziendali (aggiornamento, inserimento, cancellazione dei dati grafici ed alfanumerici)**
- **Gestione domande di ristrutturazione e riconversione vigneti e trasmissione degli elenchi di pagamento all'Organismo Pagatore**
- **Tracciatura del procedimento amministrativo**
- **Report e statistiche per UE, FEOGA, ecc.**
- **Gestione richieste iscrizioni Albi DO e Elenchi Vigne IGT**
- **Visualizzazione dei dati di produzione, raccolta e giacenza**



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Session 2 – Presentation of the Vineyard Register in Germany, by Volker Steinmetz, Staatliches Weinbauinstitut, Freiburg, Baden-Württemberg, Germany

Abstract

*In Germany, the Vineyard Register is managed at the level of *länder*, therefore there is not one VR but as many as wine-growing *länder*. Two *länder* were represented at the conference, Baden-Württemberg and Rheinland-Pfalz.*

*M. Steinmetz first presented the situation of German vineyard. Of the 16 *länder*, 10 are wine-producers, with 13 vine regions of designed origin covering 100,000 ha of vineyard. The legislation is the responsibility of the federal State (Weingesetz). The *länder* are in charge of the application of regulation (limitation of zones, administration and control of the sector, vineyard register). The VR have been developed independently. For some *länder* there are several administrative bodies involved (such as in Baden-Württemberg with 2 regional administration, one for Freiburg, one for Weinsberg). In Baden-Württemberg for the moment the VR is based on an alphanumeric database (ADABAS) but there is a plan to create a Vineyard GIS which will be linked to IACS; a call for tender has been issued, the work should start very shortly and end by 31/12/2003. A digital cadastre is already available for most of regions (ALK), and will be completed by end of 2004. It is also planned to use orthophotos (25 cm) which are already available for the whole territory and will be updated each 5 years, as well as satellite images available for arable-scheme Remote Sensing Controls. The GIS will managed graphically the Vineyard sub-parcels (defined as uniform vine planting).*

In the future there should be a GeoData Server (based on Oracle and ESRI suit) integrating cadastral data (FieldPartRegister ALB-ALK), orthophotos, IACS ad VR alphanumeric and GIS data. There is already an inter-state/federal team for IACS-GIS coordination.

M. Thomas Nette from Rheinland-Pfalz confirmed a similar situation in this Land. They plan also to create a Vineyard GIS using colour orthophotos at 25 cm resolution (update each 3 years).

(Presentation Powerpoint)



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BADEN-WÜRTTEMBERG

German Land Parcel Register and Vineyard Register

Volker.Steinmetz@wbi.bwl.de
**Staatliches Weinbauinstitut / State Institute
for Viticulture and Enology
Freiburg, Baden-Württemberg, Germany**

1st Workshop on the LandParcelIdentificationSystem
in the context of the VineyardGeographicInformationSystem

06.11.2002 VS 1



BADEN-WÜRTTEMBERG


Introduction: German Vineyards in their European Relationship

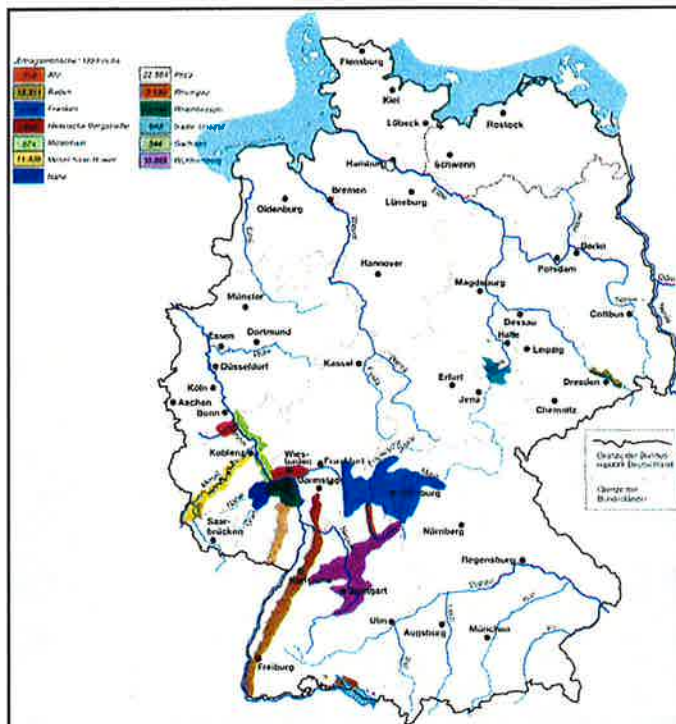
Anhang
Die Weinbauzonen in der EU

Legende:
 C: Weinbau mit Reben (Cultivated)
 C/B: Weinbau mit Reben und Busch (Cultivated/Bush)
 C/Ba: Weinbau mit Reben, Busch und Baum (Cultivated/Bush/Arboreal)
 C/Bb: Weinbau mit Reben, Busch und Strauch (Cultivated/Bush/Bush)

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in the context of the VineyardGeographicInformationSystem

06.11.2002 VS 2





Introduction: Germany's viticultural regions of defined origin

- ➔ Quality wines of defined regions (QbA)
- ➔ Quality wines and table wines are categorized by wine quality, not by their origin



BADEN-
WÜRTTEMBERG

Germany: the Federal Republic

- ➔ Germany is composed of 16 States.
- ➔ 10 of these perform viticulture
- ➔ European legislation is to be put into practice at the federal level (Weingesetz)
- ➔ Several legal provisions are assigned to the legislation of the states, including prosecution and supervision of
 - ➔ Limitation of the vineyard area,
 - ➔ Administration and control of aid schemes, payment of resulting aids
 - ➔ the regional vineyard register
- ➔ A team of IACS-experts coordinates relevant aspects at the interstate and federal level




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Main goals of the Vineyard Geographic Information System

- Simplify inspections of aid schemes and frequent checks of the vineyard register by
 - ⇒ Online localization of land parcels, requested by the wine-grower or held in the vineyard register
 - ⇒ Localization and overlay of land parcels, supported by aid schemes
 - ⇒ administration and automated comparison of the land parcel area, given by
 - Requests of wine-growers
 - Vineyard register
 - Digital aerial orthogonal photographs (DOP)
 - Land register
- Print out maps as a template for the wine-grower's vineyard register change requests and aid requests
- Online and printed maps for the wine-grower's information

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in the context of the VineyardGeographicInformationSystem

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BADEN-WÜRTTEMBERG

Example: Vineyard Register in Baden-Württemberg: now and then (1)

- Administration by 2 regional state institutes for viticulture in Freiburg and Weinsberg
- Status quo: alphanumerical database (ADABAS, Software-AG), accessed via terminal emulation within the state's intranet.
- Objective: Vineyard Geographic Information System, performed by linking the Vineyard Register to the IACS-GIS:
 - ⇒ Concept is done
 - ⇒ advertised bidding for programming is done, contract is awarded. Programming is starting now, in November 2002
 - ⇒ Deadline for realization: 31.12.2003 plus testing period 1yr

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in the context of the VineyardGeographicInformationSystem

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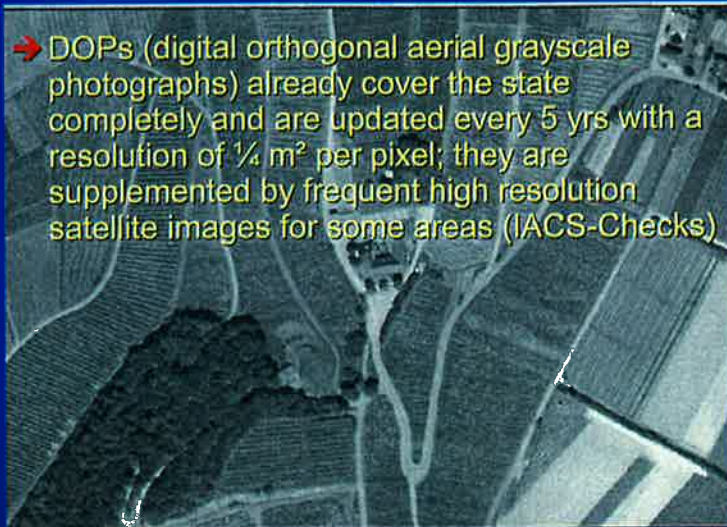


Example: Vineyard Register in Baden- Württemberg: now and then (2)

- Vineyard register is and will be based on field parts: vineyard register entries represent whole field parts or parts of field parts, each describing uniform vine planting (i.e. manager, area, year of planting, variety, defined steep slope, defined site of origin)
- Field parts are and will be administered by a defined administrative state unit (Landesvermessungsamt).
- The automated field part register (digital land register) is already available for most regions and will be completed until 31.12.2004: 2 databases include geometrical/map and alphanumeric data of field parts ALK (map) & ALB (alpha)
- Recent frequent Checks include area comparison of alphanumeric data from the automated field part register and the vineyard register, manual interpretation of corresponding official viticultural maps 1:2.500 and direct field inspection and will be completed by orthophotos and partial automation of the process.

Example: towards the vineyard geographic identification system: orthophotos

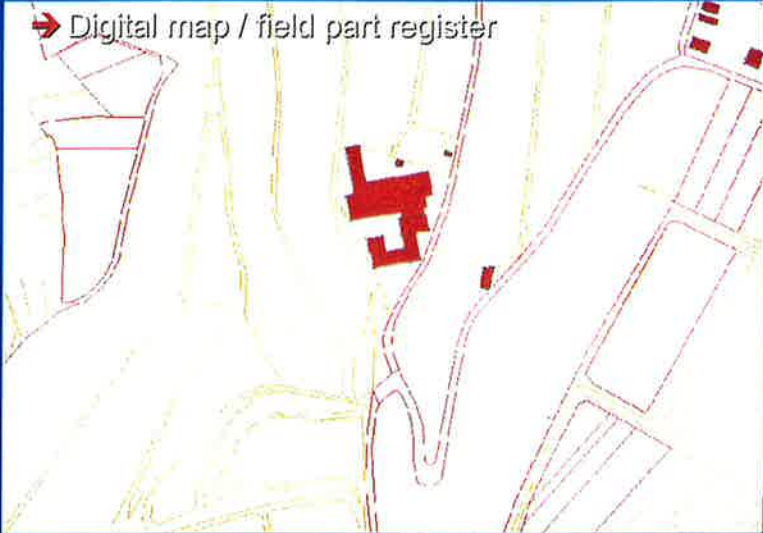
- DOPs (digital orthogonal aerial grayscale photographs) already cover the state completely and are updated every 5 yrs with a resolution of 1/4 m² per pixel; they are supplemented by frequent high resolution satellite images for some areas (IACS-Checks)



BADEN-WÜRTTEMBERG


Example: towards the vineyard geographic identification system: geographical land register

➔ Digital map / field part register



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STAATLICHES WEINANWISSENSTUFTZENTRUM FREIBURG

BADEN-WÜRTTEMBERG

Example: towards the vineyard geographic identification system: vineyard register


➔ Recent status: alphanumeric database

```

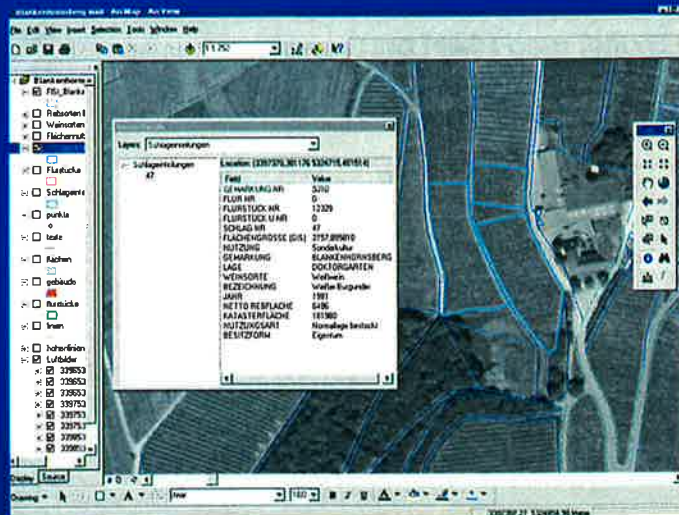
Das angegebene Flurstück ist nicht in der Weinbau-Kartei vorhanden
A11122-M A11122-P Weinmarktverwaltung Baden-Württemberg 27.11.01 16:06:41
WBIFRBR 1.1.1.2.2 Verarbeitung Flächendaten (WBA) 1 139
-----< B a d e n >-----
Antragsteller-Nr. : Name :
Betr.-Nr. (QWP) : 0000 Vorn.:
Betr.-Nr. (SP) : BW 0000 Str. :
Matchcode : RAUENBURGG PLZ : 00000
Flurstück-Nr./-U-Nr. : 06939 / Ort :
Flurstück-Position : Los-Nr. :
Gemarkung :
Katasterfläche : qm
zulässige Rebfläche : qm
Summe Nettorebfläche : 00000000 qm ALB-geprüft: _
FORTSCHREIBUNG RP-Daten
Rebsorte : 000 000 Übernahme :
Rodungs-/Pflanzjahr : 0000 Sortengruppe :
Nutzungsart / Bio : 0 / Kartenblatt-Nr.:
Besitzform : 0
Nettorebfläche : qm 000000 qm Bearbeiter :
Betriebs-Nr. EZG : 0000 MfgNr.: Datum :
Direktkommando:
Enter--PF1--PF2--PF3--PF4--PF5--PF6--PF7--PF8--PF9--PF10--PF11--PF12--
Anz Hist Vor Ende Korrr Menü Haupt
TB
  
```

1st Workshop on the LandParcelIdentificationSystem
in the context of the VineyardGeographicInformationSystem

06.11.2002 VS 10


STAATLICHES WEINANWISSENSTUFTZENTRUM FREIBURG

Example: towards the vineyard geographic identification system: combined information



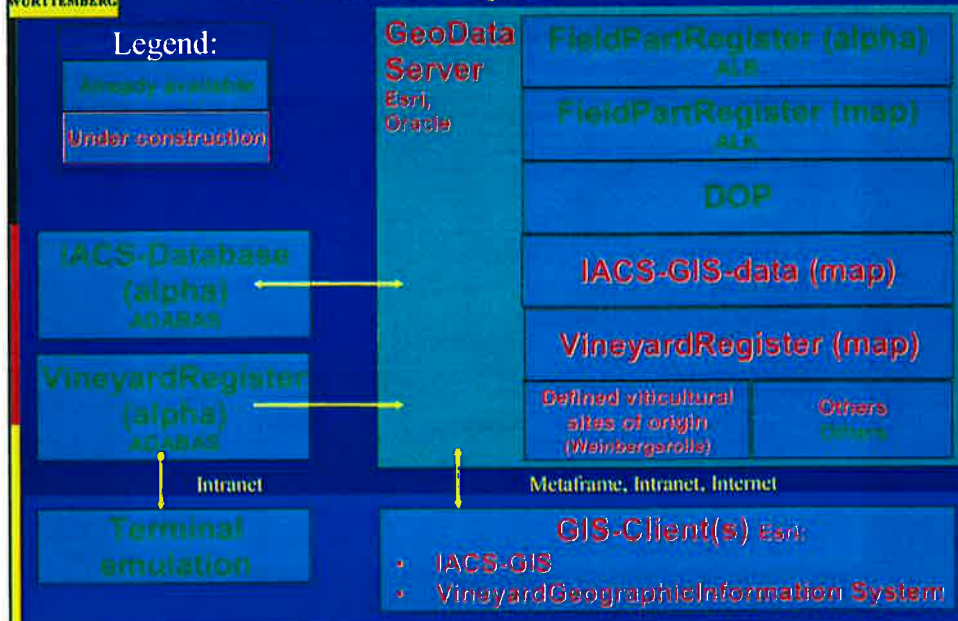
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in the context of the VineyardGeographicInformationSystem

06.11.2002 VS

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Example: towards the vineyard geographic identification system: technical view



Summary

- The German Vineyard Geographic Information System is to be realized at the state level
- An interstate/federal team is coordinating the realization of the IACS-GIS projects
- Current data (vineyard register and IACS database) are to be included into the IACS-GIS
- Conception/realization was started already



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Session 2 – Presentation of the Vineyard Register in Portugal, by *Carlos Jorge de Melo, Instituto da Vinha e do Vinho (IVV), Lisbon*

Abstract

*M. Melo first presented the characteristics of Portuguese vineyard, which covers **238,073 ha** in 8 vine-growing regions. Several organisations are involved in the management of the Wine CMO in Portugal: the IVV is responsible for the management of planting rights and works in relation with the regional services of the Ministry of Agriculture, financial organisation (INGA and IFADAP for restructuration plans) and inter-professional organisation for the registered designations of origin.*

*A vineyard GIS (called SIGV) has been implemented in Portugal, covering **1,063,714 vineyard parcels, 207,000 holdings** and 14,000 ha planting rights. The average size per plot is **0.22 ha**. Orthophotos have been used since 1995: 1m (1995), 30 cm (1999/2000) and 20 cm (1995). The system is based on Oracle 8 Spatial database, and MGE Intergraph/MicroStation for the GIS part which manages graphically parcels and vineyard plots (linked to one farmer), making possible to create, split, remove, merge parcels. The database contains the history of parcels and vineyard.*

Then M. Melo presented the integration of SIGV within the LPIS. He stressed that the VR was started before the implementation of IACS. Then basic rules have been defined to establish relationships between LPIS and SIGV parcels: when LPIS parcel = SIGV parcel, the geocode is the same, otherwise a special code was assigned (SIGV parcel not existing in LPIS, code = 10, change of LPIS block limits: code =20). The problem is that there were many changes in the geometry of SIP parcels because the initial objective of LPIS was not to handle vineyard parcels. For the moment the integration model is still in discussion and the SIGV database has been provided to INGA. M. Melo also highlighted that the duplication of data is not a simple issue, since updating is a continuous task for SIGV but a periodical one for INGA.

(Presentation Powerpoint)

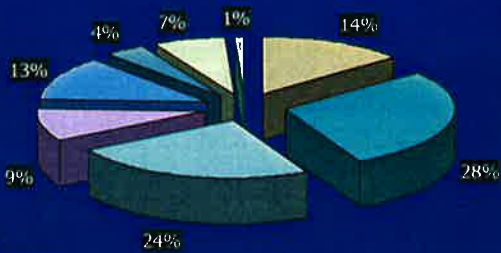


- 1 - Portuguese wine-growing areas
- 2 - management of wine-growing potential
 - a) institutional organization
 - b) monitoring vineyards with GIS (SIGV)
 - c) management and control of planting rights
- 3 - SIGV integration within the LPIS
 - a) integration establishment - basic rules
 - b) general proceedings
- 4 - constraints & development

1 - Portuguese wine-growing areas



Wine-growing inventory
238 073 ha



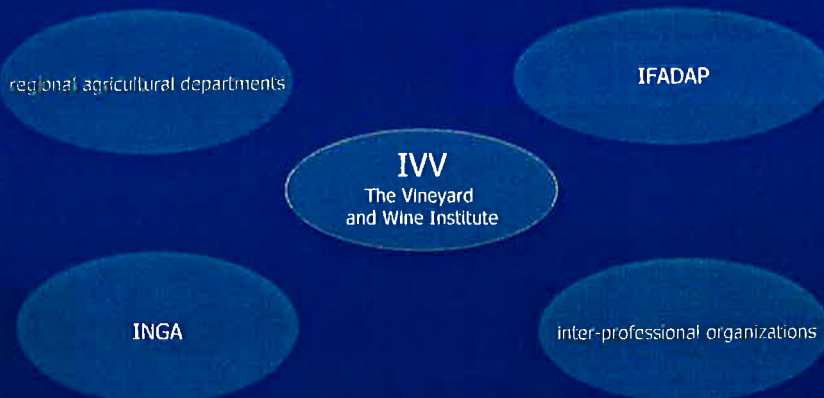
- Minho
- Trás-os-Montes
- Beiras
- Ribatejo
- Estremadura
- Terras do Sudoeste
- Alentejo
- Algarve

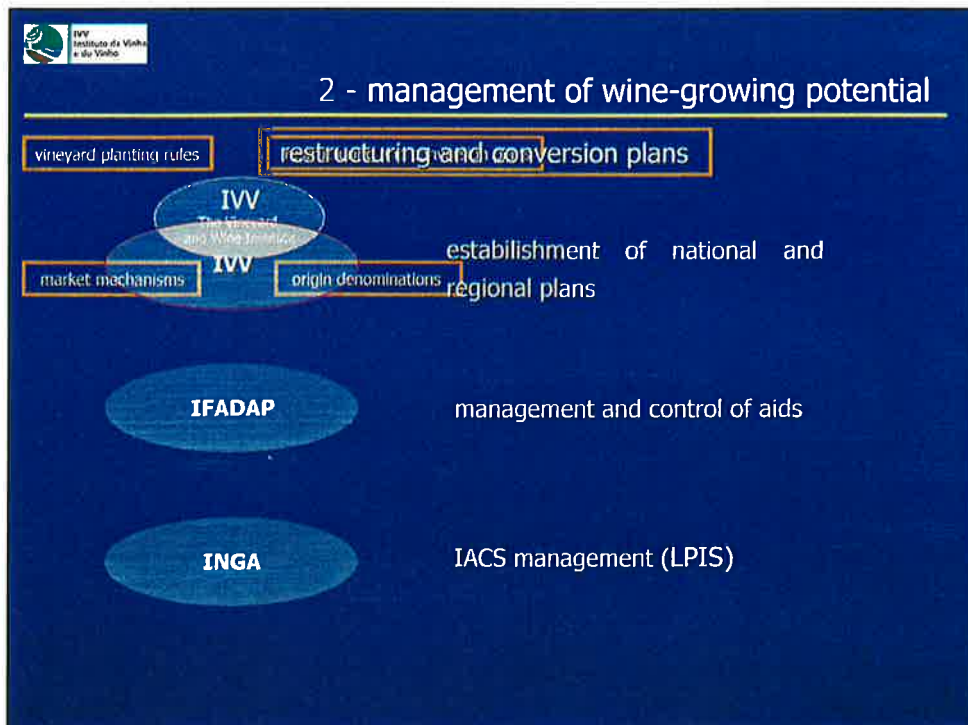
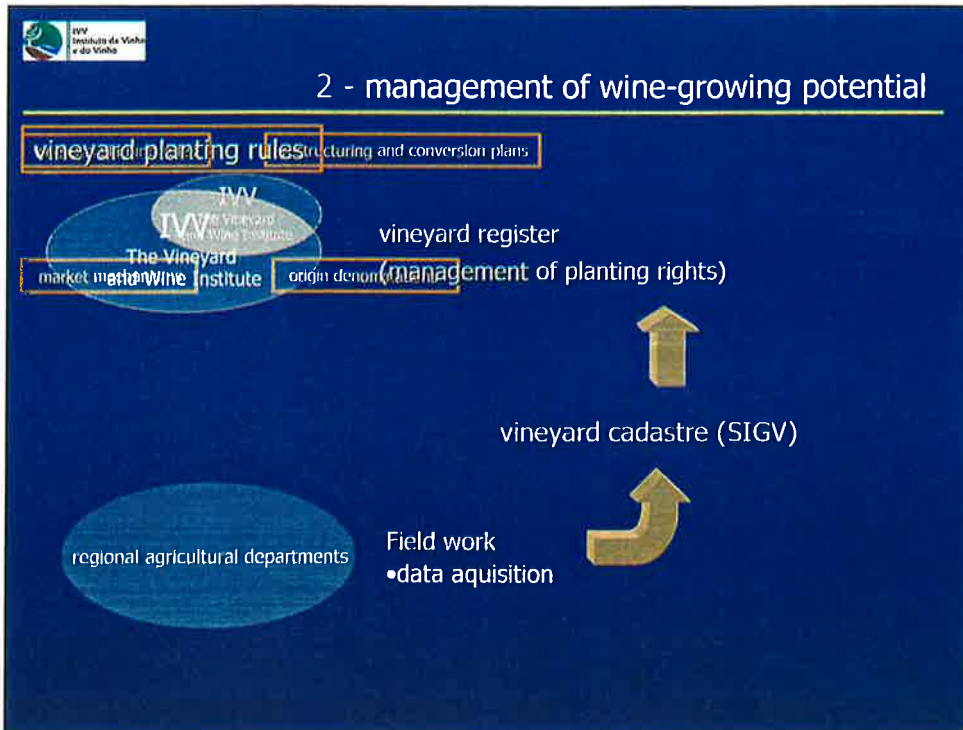
Source: Portuguese Inventory (2011/09/2010)

2 - management of wine-growing potential

a) institutional organization

Common organization of the market in wine





2 - management of wine-growing potential

b) monitoring vineyards with GIS (SIGV)

- Digital orthophotomaps vineyard parcels **1 063 714**

Scale: 1 m
 min: 30 cm
 max: 409,000

Date
 1995
 1999/2000
 1995

- Vectorial data farmers **207 000**

Simplified Cartography (1:100 000) Gh
 8 MGD (projected) Middle Mercator (British)
 • 1 dgn = 1 administrative level (municipal)

- Tabular data **14 000**



2 - management of wine-growing potential

b) monitoring vineyards with GIS (SIGV)



Fundamental relationships

Graphic table (parcel)

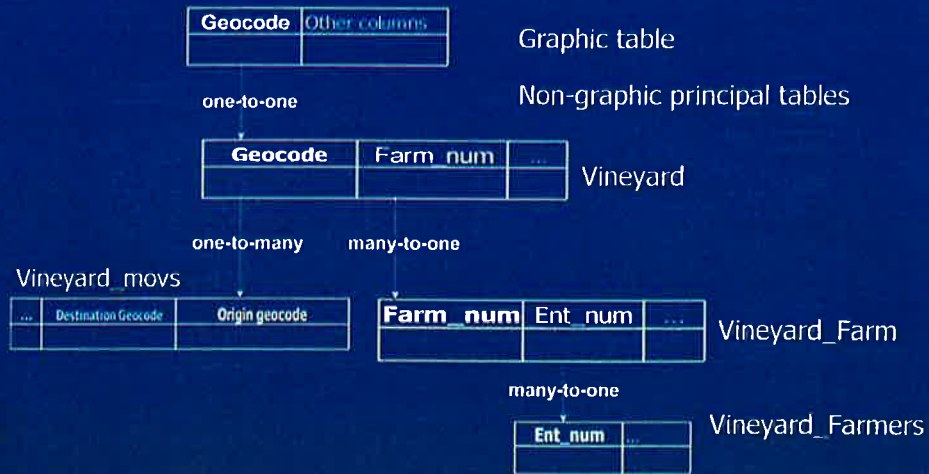
MSLink	Mapid	Geocode	Other columns
		227143 460034	

xxxxxx yyyyyy (meters)

Start: (m) (227143.100000, 460034.000000)
 End: (m) (227143.100000, 460034.000000)

2 - management of wine-growing potential

Basic structure of spatial database



2 - management of wine-growing potential

c) management and control of planting rights

Douro Project

Management procedures

- Remove parcel
- Split parcel
- Merge parcels
- Create a new parcel

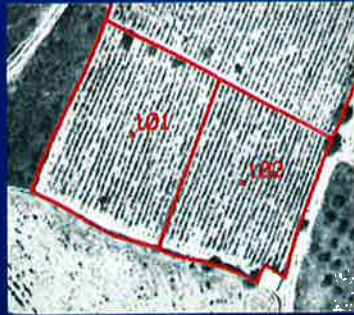
Graphic and database tasks

- Mstation Development Language (MDL)
- Oracle Triggers

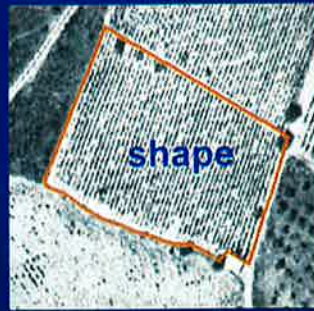
2 - management of wine-growing potential

split parcel - graphic task

'active' design file (*.dgn)



'historical' design file (*.his)



2 - management of wine-growing potential

split parcel - database task



▼ delete

parcel

mslink	100001	100002
parcel number	101	102
geocode	259584465462259612465456	
area	0.1970	0.1976

vineyard

geocode	259584465462259612465456	
area	0.1970	0.1976
other columns

insert records
 edit records
 insert new record

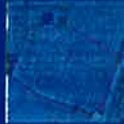
work table

geocode	259597465468	
area	0.3946	
other columns	...	

2 - management of wine-growing potential

split parcel - database task

'active' design file (*.dgn)



parcel
name
parcel number
area
vineyard
area
other columns

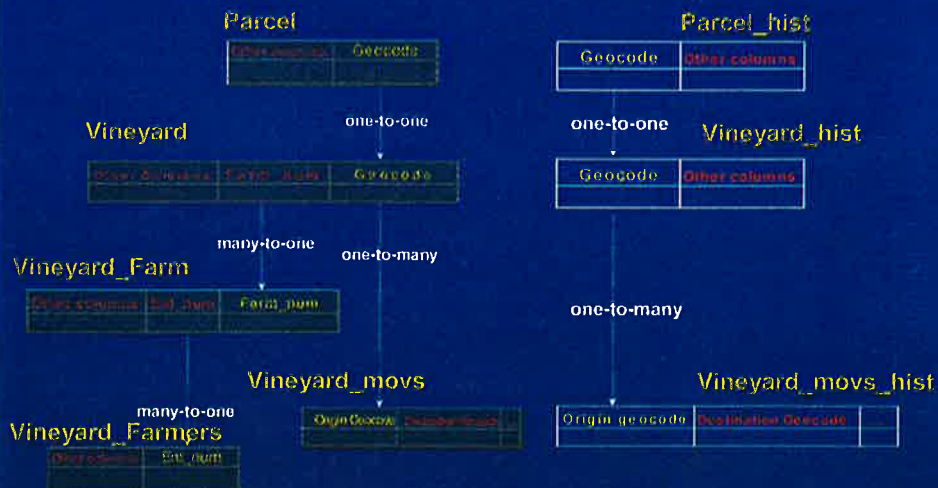
'historical' design file (*.his)



mslink	78888
parcel number	57
geocode	259597465468
area	0.3946
vineyard_hist	
geocode	259597465468
area	0.3946
other columns	***

2 - management of wine-growing potential

Relational Database Model



3 - SIGV integration within the LPIS

a) integration establishment - basic rules

SIGV implementation



LPIS data

- ortophotocartography
- graphic data (parcels & blocks)
- alphanumeric data

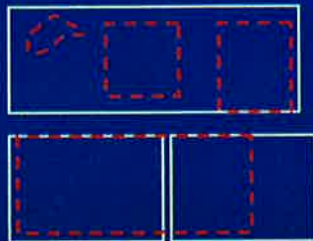
relationship between LPIS parcel and SIGV parcel

3 - SIGV integration within the LPIS

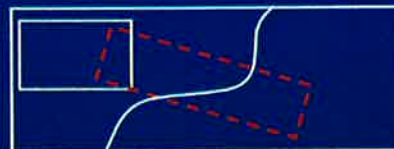
graphic & alphanumeric procedures

PARCEL

LPIS parcel \neq SIGV parcel



Geocode	ALTER CODIG
	20

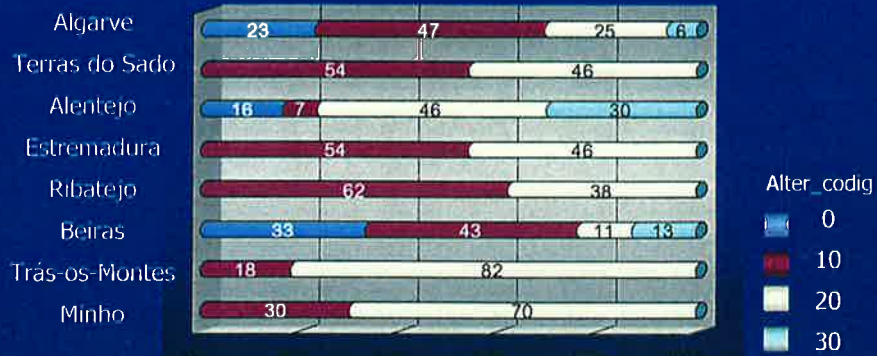


- LPIS parcel
- SIGV parcel
- block boundary

3 - SIGV integration within the LPIS

graphic & alphanumeric procedures- final results

Graphic changes between LPIS and SIGV (%)



3 - SIGV integration within the LPIS

b) general proceedings

Integration model (in discussion)



- Vectorial data (vineyard parcels)
- Attribute data (vineyard, vineyard_farmers)

a) constrains

- sharing and updating data between different organizations
 - Accessing data (networking, replication...)
 - Resources availability
- different data actualization procedures
 - SIGV continuous
 - LPIS periodic
- spatial databases with different accuracy
 - SIGV goal - keeping actual vineyard's register (planting rights...)
 - LPIS goal - monitoring all agricultural parcels (IACS, aid schemes...)

b) development

- deploying data
 - upgrade of spatial data formats
 - development of web based interfaces (querying /editing)
 - database management and administration (historical data, security...)
- organization (institutional) model
 - redefining competencies
 - organization synergism
- procedures
 - simplification
 - training



Portuguese vineyard register

The Vineyard and Wine Institute

Carlos Melo / Ana Isabel Luz

November 2002

cmelo@ivv.min-agricultura.pt



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Session 2 – Presentation of the Vineyard Register in Austria, by *Christian Jaborek*,
Leiter der Abteilung III/8 - Wein im BMLFUW Bundesministerium für Land- und Fortswirtschaft &
Stefan Horvath, *region of Burgenland*

Abstract

*This presentation was in two parts: the first one presented by M. Christian Jaborek head of the Wine Department at the Federal Ministry of Agriculture in Vienna. The second one presented by M. Stefan Horvath responsible of Vineyard Register for the Province of Burgenland and co-ordinator between the 4 vine-growing Austrian regions. Austria has a federal system and the organisation is similar to Germany, since the application of Wine market rules is decentralised in the Länders (of 9, 4 are wine-producers). However the legislation at province level is directly derived from European regulation (without laws at federal level). Several provincial administration and local administrative authorities are involved in the wine sector management. The management and updating of VR, as well as planting rights, are the responsibility of provincial authorities. M. Jaborek presented some statistical data on Austrian wine production: the vineyard covers **48,000 ha** and **32,000 vine holdings**.*

In the second presentation, M. Horvath presented the Vineyard Register of Burgenland. It started in 1969 with paper information, then moved to digital alphanumeric database in 1980. Since 2002 a Vineyard GIS has been set up; it contains digital cadastre maps (BKM), orthophotos (optional) and vineyard sub-parcels thematic layer.

(Presentation Powerpoint)



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Vineyard Registration in Austria



Part 1: Basics - Particularities of the Regionalisation

Your lecturer

Christian JABOREK

head of the wine department in the
Austrian Federal Ministry of
Agriculture, Forestry, Environment
and Water Management
in Vienna

Basic Data

- **Austria: 48.000 ha, ± 2,5 Mio. hl per year**
75% white wine (37% Grüner Veltliner), 25% red wine
- **32.000 wine growers**
7.000 produce bottled wines with direct marketing
2.500 > 5 ha, 20.000 < 1 ha
- **65% of the growers are wine producers (I: 10%)**
50% of the wine production is sold directly on the farm
- **Consumption: ± 2,5 Mio hl (30 l per capita)**
- **Export: 338.000 hl (268.000 hl EU, 90% Germany) ↗**
- **Import: 374.000 hl (341.000 hl EU, 80% Italy) ↘**

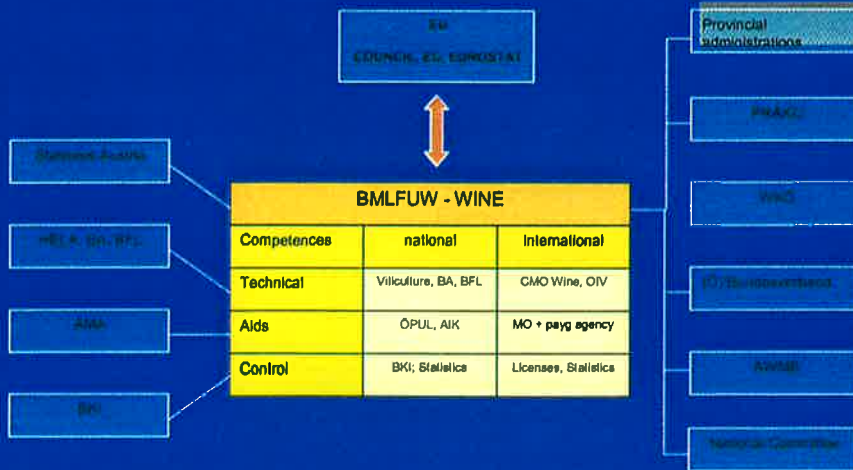
3

Wine Quality Categories

- **Table wine: no regions, Zone B**
- **Regional wine („Landwein“): 4 Regions; 8,7% alc.**
- **Quality wine: 23 regions; 9,5% alc. (15 kg sugar/100 kg must or 15° KMW)**
 - „Kabinett“: 17° KMW, no enrichment
- **Quality wines with attribute („Prädikatsweine“):**
 - e.g. late harvest, grape selections, frozen grapes, botrytis type; no enrichment
 - natural sugar 19° - 25° KMW (12,8 - 18 % alc.)
- **Enrichment with sucrose (2,5%)**
- **Max. yield: 9.000 kg grapes or 6.750 l wine per ha**

4

Organisations with regard to wine



5

Wine Law

- Federal system (9 Länder, 4 with wine production)
- Four „Wine Production Laws“
 - Where can be vineyards („Flur“)
 - Management of planting rights (vineyard register)
⇒ *Regional Administration Authority (RAA)*
- One „Wine Law“
 - Oenological practises, labelling, consumer protection
 - Quality categories, control number
 - Harvest & stock declaration, cellar register
 - Control Authorities
⇒ *Ministry for Agriculture (and RAA)*

6

Wine legislation

Subject	EC-legislation		Federal law		Provincial law	
	„Law“ making body	„Regulation“ issuing body	„Law“ making body	„Regulation“ issuing body	„Law“ making body	„Regulation“ issuing body
Vine propagation material	• Vine Marketing Directive		• Law on Marketing of the vine • Reg. on Marketing of the vine		• Reg. on Marketing of the vine	
	COUNCIL	EC	National Council	Federal Minister		Provincial Government
Wine-Growing	• CMO Wine				• Provincial laws • Provincial regulations • Decrees of the Governor	
	COUNCIL	EC			Parliament of the Federal Provinces	Provincial Government, District administrative Authority
Wine-Production, Control	• CMO Wine		• Wine Act • Market Organisation Act • Regulations and Decrees			
	COUNCIL	EC	National Council	Federal Minister		

7

Authorities and Associations

Organisations	Federal level	Provincial level	District level	Local level
Authorities Offices Institutions	BMLFUW – BKI Federal Institutes Federal Secondary Colleges and Federal Offices	Offices of the Provincial Governments Colleges under Provincial administration	District administrative authorities (BVB) and municipal administrative authorities („Magistrate“)	Local offices
Professional representations	WKÖ PRAKO	Economic Chambers of the Federal Provinces Chambers of Agriculture of the Federal Provinces		
Vine-growers' associations	Austrian Federal Office for Wine-Growing	Provincial wine-growers' associations	District wine-growers' associations	Local wine-growers' associations
Marketing company	AWMB			

8

Transmission of data

Administrative level	Authorities / Offices	Obligations / activities
Federal level	BMLFUW, Statistics Austria, Federal WineControl Board	Control, Updating of data, Report to the EU
Provincial level	Offices of the Provincial Governments, District administrative Authorities	Control, Keeping of the Vineyard Register Reports
Local level	Local offices	Control, Reports

Wine grower

Legal obligation to notify

9

Data content of the vineyard register

A) for every wine growing estate

- name of the owner
- address
- areas under vines
- statistical number
- replanting rights

10

Data content of the vineyard register

B) for every parcel

- community and name of the plot
- number and size of the parcel, size of the planting
- name and address of the wine grower
- name and address of the owner
- intended use of the planting (production of cuttings - nursery - table grapes - wine production)
- training system
- varieties
- planting year
- grubbing up and replanting

11

Thank you for your attention



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Vineyard Registration in Austria



Part 2: Development of the Vineyard Register to a GIS

Your lecturer

Stefan HORVATH

wine department in the
Provincial Government
of Burgenland in Eisenstadt
and co-ordinator between the 4 wine
growing provinces (Lower Austria,
Burgenland, Styria and Vienna)

Vineyard Register in Austria

example
Burgenland



15

Card - index from 1969 History

1969

map

index



16

Digitalisation in 1980

History

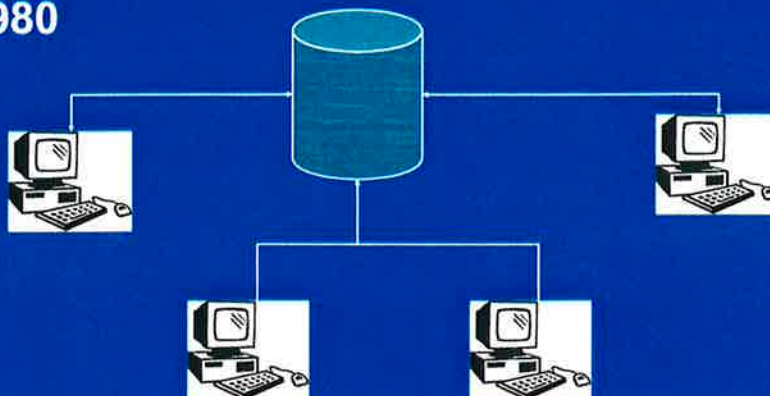
1980
map
Computer



17

Network from 1980

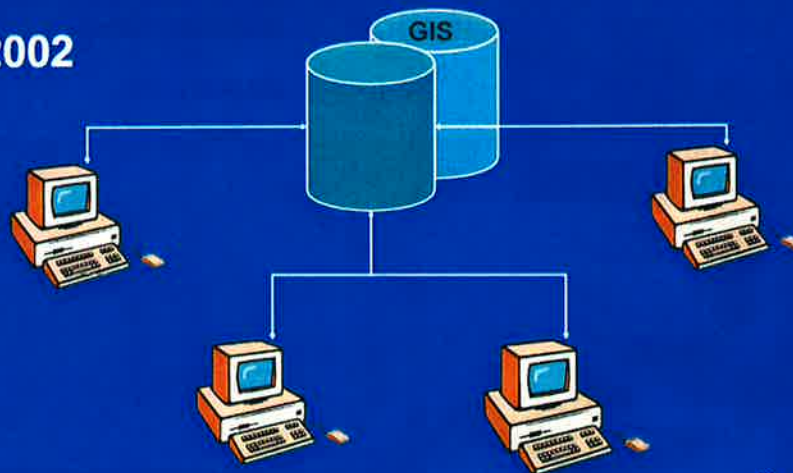
1980



18

Network from 2002

2002



19

Content of the Data Base

2002

- **basic data**
 - producers`data
 - parcel data
- **vineyards**
 - replanting
 - grubbing up
- **regional reserve**
 - replanting rights

20

Bundesministerium für
Land- und Forstwirtschaft,
Umwelt und Wasserwirtschaft
BMEL

Basic Data

2002 data

21

Bundesministerium für
Land- und Forstwirtschaft,
Umwelt und Wasserwirtschaft
BMEL

Geographic Information System

2002 GIS – functions

- **presentation**
 - graphic presentation of selected data
 - aerial photograph (optional)
- **thematic evaluation**
 - spreading areas under vine
 - spreading of varieties
 - spreading of planting years
 - inclination
 - grubbing up / replanting

22



 Bundesministerium für
Land- und Forstwirtschaft,
Umwelt und Wasserwirtschaft
Bund *Österreich*

Evaluation


2002 Example: div. varieties



23


 Bundesministerium für
Land- und Forstwirtschaft,
Umwelt und Wasserwirtschaft
Bund *Österreich*

Thank you for your attention



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EUROPEAN COMMISSION
DIRECTORATE GENERAL JRC
JOINT RESEARCH CENTRE - ISPRA
Institute for Protection and Security of the Citizen
MARS Unit

Session 2 – Presentation of the Vineyard Register in Greece, by *M. Panagiotopoulos*,
Topographic Service of the Hellenic Ministry of Agriculture

Abstract

Olive and vineyard are very old production in Greece and are located in the same areas. That is why it was decided to implement simultaneously Olive and Vineyard GIS in Greece. The Vineyard covers 125,000 ha (3.3% of the agricultural land). A first phase (orthophotos and ilotage) has been completed. The updating of orthophotos and ilot maps coverage has started.

For the second phase (implementation of registers) the Ministry has contracted 14 lots (2 are still to be signed). To date none of the Nomi is yet completed. However the dry raisin register (33,266 ha) has been completed on 31/7/2002 (which postponed the Olive and Vineyard GIS progress).

M. Panagiotopoulos then presented some examples showing olive trees and vineyard parcels on orthophotos background.

(Presentation Powerpoint)



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MARS Unit



HELLENIC REPUBLIC
MINISTRY OF AGRICULTURE

**VINEYARD GEOGRAPHIC
INFORMATION SYSTEM**

AND

**OLIVE GEOGRAPHIC
INFORMATION SYSTEM**

IN GREECE

- **INTRODUCTION**
- **SIMULTANEOUS
IMPLEMENTATION OF THE TWO
REGISTERS.**
- **PROGRESS OF WORKS**
- **REGISTER OF RAISIN**
- **EXAMPLES OF VINEYARDS AND
OLIVE PARCELS IN GREECE.**

INTRODUCTION

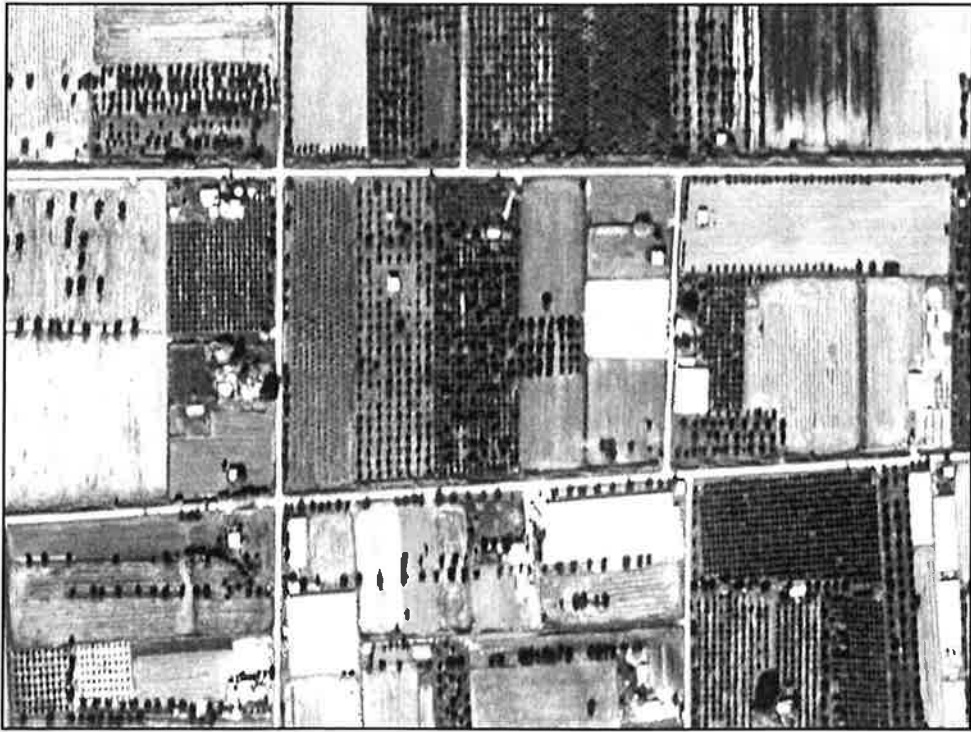
Olive and vineyard are two of the most important cultivations in Greece.

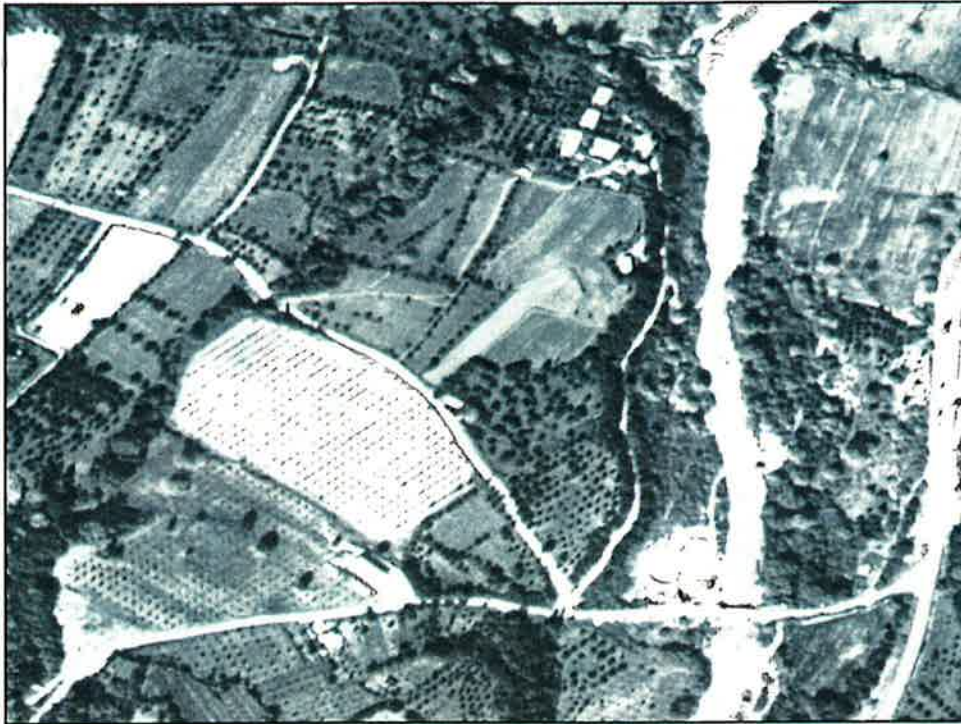
Olive cultivation expands in 1.128.000 ha approximately, which represents the 29 % of the overall cultivated land.

Vineyard cultivation expands in 125.000 ha approximately which represents the 3.3 % of the overall cultivated land.

SIMULTANEOUS IMPLEMENTATION OF THE TWO REGISTERS

The two registers take place **simultanouesly** in Greece as there is no distinction between the cultivation areas for the olive and vineyard cultivations.





Advantages of the abovementioned choice

- Fewer administrative procedures (Call of tenders, etc.)
- Less cost for the implementation of the registers.
- The cultivator meets just once the contractor in order to declare his olive and vineyard.

PROGRESS OF WORKS

The two registers are conducted nowadays in the whole country except of the followings nomos:

- Viotia
- Ethiotida
- Pieria
- Cyclades
- Dodekanisa
- Samos
- Chios
- Lesvos

•For the nomos **Viotia, Ethiotida and Pieria** the contract has been already signed by the contractor.

•For the nomos **Cyclades, Dodekanisa, Samos, Chios and Lesvos** which are situated in the Aegean Sea approval is expected by the National Court of Controls.

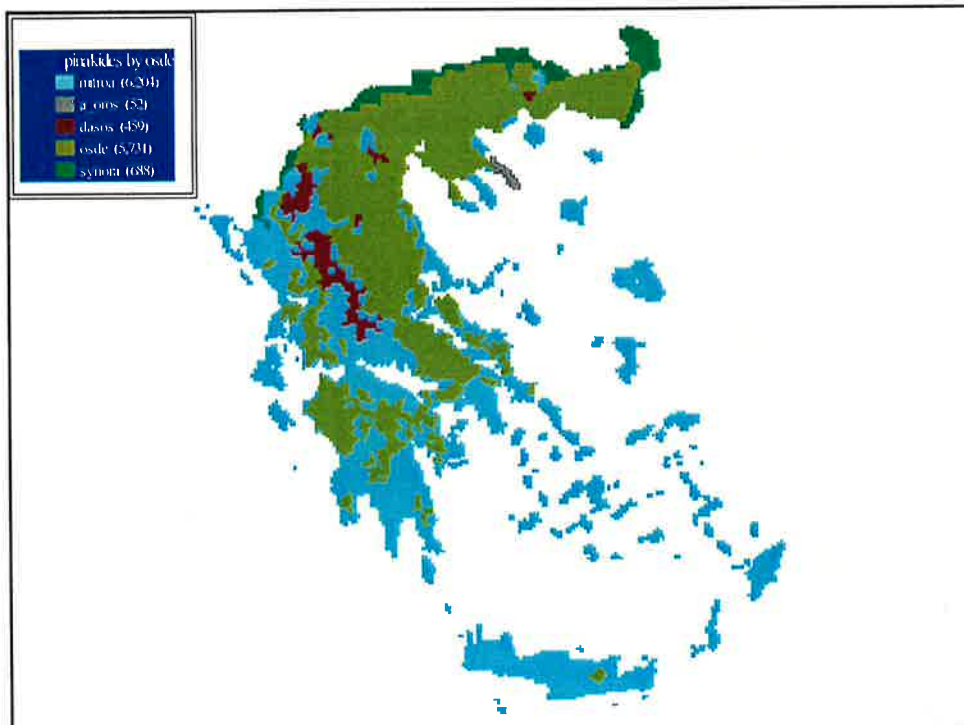
The total area of olives and vineyards in the first group of nomos(Pieria, etc) is 3347 ha and 935 ha respectively.

Tha total area of olives and vineyards in the second group of nomos (Lesvos etc.) is 7221ha and 1263 ha respectively.

Progress of works per nomos
and per stage is shown at the
following table

Moreover the following procedures are in progress:

- Choice of the **Technical Consultant**
- Determination of **unified structure** of the digital files
- Completion of the **chartographic base** in the nomos where charts are missing.



Despite all the abovementioned it has already started the update of the cartographic base.

This work will include the following stages:

- Production of **new orthophotos**
- Production of **new blocks**, where there is change of infrastructure(eg, Consolidation, new highway, etc.)
- Updating of **the parcel's code numbers** where we find block changes.

REGISTER OF RAISIN

In the nomos where raisin is cultivated are the followings:

- Argolida
- Achaia
- Ilia
- Korinthia
- Messinias
- Iraklion, Lassithi, Rethymno, Chania
- Zakynthos, Kefalonia.

The above mentioned nomos are situated in the Southern part of Greece and in the Ionian islands.

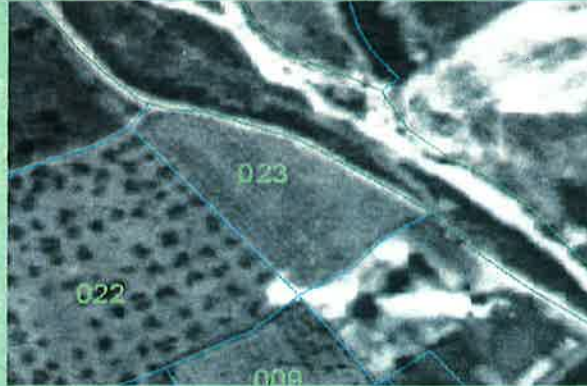
The total area of raisin is 33.266 ha.

Orders to implement the register of raisin had been given to the Contractors responsible for the implementation of registers, which was completed in time (31st of July).

The data of this register have already been given to the responsible services of each nomos.

EXAMPLES OF VINEYARDS AND OLIVE PARCELS IN GREECE

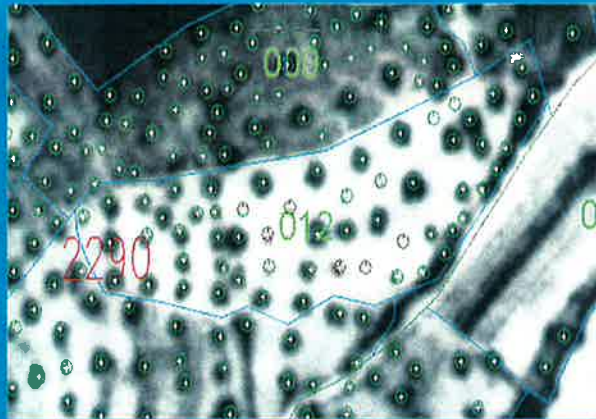
Parcel no 401-193-6308-023. In this parcel 32 olive trees are identified that were planted in 1997 and they do not appear in the orthophoto .



Parcel no 401-192-0230-008. This parcel had in the past 10 old olive trees. During the on the spot control together with the old ones 28 new olive trees were found which were planted before the 1/5/1998 and are not shown in this orthophoto.



Parcel no 400-191-2290-012. In this parcel 75 olive trees were declared but finally only 60 were found.



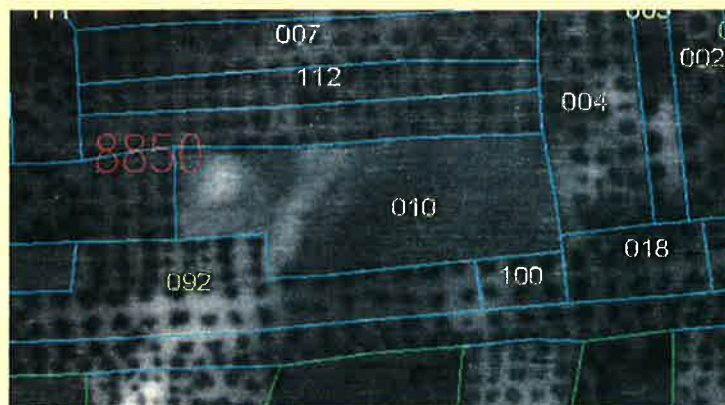
A) In the lot 5745 the olive parcel 1.5 ha was declared and was found 1.51 ha. Moreover 250 olive trees were declared and 250 trees were found.



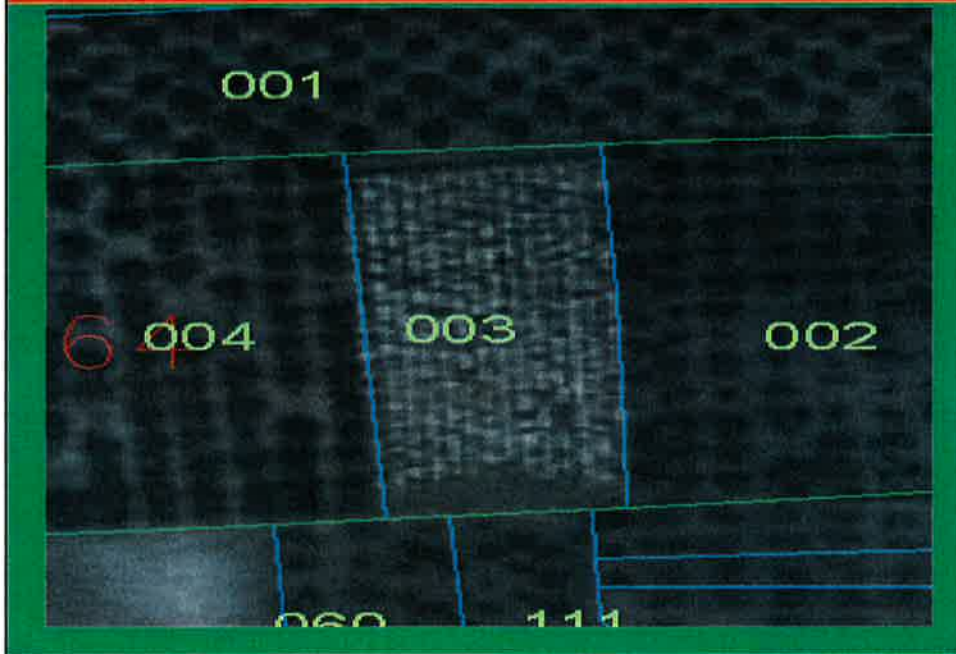
A) In the ilot 8670 the olive parcel 009 was declared for 0.15 ha and was found 0.15ha. Moreover 25 olive trees were declared and 25 trees were found.



In the ilot 8850 the vineyard parcel 010 was declared 0.7 ha and was found 0.7 ha



On the contrary in the ilot 7664, in the vineyard 003 0.5 ha was declared and 0.42 ha was found



END

of presentation



EUROPEAN COMMISSION
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Session 2 – Presentation of the Vineyard Register in Luxemburg, by Jeannot BONIFAS, Institut Vini-viticole of Remich

Abstract

M. Bonifas briefly presented basic data on the Vineyard of Luxemburg which represents less than 0.5% of the UE vine area with 1,342 ha (of which 1,298 ha on production) and less than 6000 vineyard parcels. He stressed that the average size per vineyard parcel is 0.22 ha, instead of 0.5 ha in the presentation of the Commission.

The Vineyard Register was completed in 1990 and it is managed by the Institut Viti-Vinicole (IVV) in Remich. The old system with 2 coupled IBM central units was replaced in July 2002 by a new system integrated with IACS. A new census (deadline September 2002) was undertaken where vine-growers have to fill declaration of their vineyard area. The new integrated system is managed by the Centre d'Informatique de l'Etat, connected to the Ministry of Agriculture, to the IVV and to various organisations.

M. Bonifas showed how the system handles vineyard parcels (agronomic and geographic data) which can be a group of contiguous cadastral parcels. For each cadastral parcel the system manages the cadastral area and the cultivated area. The management of cadastral parcels includes cross-checking with cadastre data (report errors if a cadastral parcel cannot be found in the cadastre files). Other information concerning the holding (e.g. on cattle) can also be accessed here.

In conclusion the VR in Luxemburg is already integrated with IACS. For the next few months the plan is to upgrade the application for the management of subsidies and the statistics. Then it is planned to set up a GIS with orthophotos and digital cadastre by January 2004.

(Presentation Powerpoint)

Casier viticole luxembourgeois



Institut Viti-Vinicole

1



2

La viticulture luxembourgeoise
représente moins de 0,5 % de la
superficie viticole européenne.

Superficie totale: 1.342 ha
dont 1.298 ha en production

Elbling et Rivaner: 44 %
Auxerrois, Pinot blanc, Pinot gris
Pinot noir, Riesling et Gewürztraminer: 56 %

Institut Viti-Vinicole

3



Fus de maintenance
à partir du 01.01.2003

Ordinateurs centraux, couplés en Sysplex

IBM 2064/101 (Z900)

IBM 2066/012 (Z800)



31 décembre 2002
en pension

4

Recensement viticole Weinbau-Kartel Erhebung		Réf: 300
Numéro d'exploitation Betriebsnummer 153-160		Institut viti-vinicole Remich 28 AOUT 2002 Réf.: 430/18-2002
1 Données générales concernant le chef d'exploitation Allgemeine Angaben zum Betriebsleiter		
Nom Name		
Prénom Vorname	Le recensement viticole	
Matricule sécurité sociale Sozialversicherungsnummer		
Rue et numéro Strasse, Nr		
Code postal et localité PLZ und Ort	L- 5690	
Exploitant à titre principal Hauptberuflicher Winzer/Landwirt	Oui Ja <input checked="" type="checkbox"/>	Non Nein <input type="checkbox"/>
Téléphone Telefon	668421	
Téléfax		
Email		
Code banque Finanzinstitut	CCPL	
Numéro de compte Kontonummer	33799-43	
Localité de l'exploitation Ortschaft des Betriebes	L-5690 ELLANGE	

2 Déclaration des données servant au calcul des marges brutes standards Meldung von Angaben zur Berechnung der Standarddeckungsbeiträge					
Vignobles Weinberge	Non en production	Nicht im Ertrag	ha	ar	ca
	En production	Vente raisin / Verkauf Trauben			
	Im Ertrag	Cave / Eigene Kellerei	3	46	79
	Coopérative Genossenschaft von	Remerschen Localité / Ortschaft			
3 Prime à l'entretien du paysage et de l'espace naturel Landschaftspflegeprämie					
Confirmation du respect des conditions prévues au règlement grand-ducal du 9 novembre 2001 et demande consécutive de paiement pour l'année culturale: 2002			Oui <input type="checkbox"/>	Non <input type="checkbox"/>	
Bestätigung der Einhaltung der im Rahmen des grossherzoglichen Reglements vom 9. November 2001 eingegangenen Verpflichtungen und Beanstandung auf Gewährung der besagten Prämie für das Erntejahr: 2002			Ja <input checked="" type="checkbox"/>	Nein <input type="checkbox"/>	
Institut Viti-Vinicole					
6					

Le présent document doit être renvoyé à l'Institut Viti-Vinicole à la date du	:	01.09.2002
Les données doivent refléter la situation de l'exploitant tel qu'elle se présente au	:	01.09.2002
<i>Dieses Formular muss an das staatliche Weinbauinstitut zurückgeschickt werden. Einsendetermin ist der</i>	:	01.09.2002
<i>Die Angaben müssen der Situation des Betriebes entsprechen wie sie am folgendem Datum gegeben ist</i>	:	01.09.2002

Les engagements du viticulteur

Les données du présent formulaire peuvent être utilisées pour le calcul d'autres primes demandées dans le cadre de la nouvelle loi agricole.

Les indications servent également:

- pour le calcul du rendement de l'exploitation conformément à la loi du 21 janvier 1993 relative au rendement des vignobles;
- pour le calcul des cotisations à verser au Fonds de Solidarité viticole conformément au règlement grand-ducal du 21 janvier 1994 autorisant la création et l'exploitation d'une banque de données au profit de l'Institut Viti-Viticole;
- pour la mise à jour du casier viticole, conformément au règlement (CEE) N° 2392/86 du Conseil du 24 juillet 1986 portant établissement du casier viticole communautaire.

Die im vorliegendem Formular gemachten Angaben können für die Berechnung anderer im Rahmen des Agrargesetzes beantragten Hilfen herbeigezogen werden.

Diese Informationen werden u.a. benutzt:

- zur Berechnung des erwirtschafteten Hektarertrags gemäss Gesetz vom 21 Januar 1993 hinsichtlich der Erträge im Weinbau;*
- zur Berechnung der Beiträge im Fonds de Solidarité Viticole gemäss grossherzoglichem Reglement vom 21 Januar 1994;*
- zur Aktualisierung der Weinbaukartei, gemäss (EWG) Verordnung des Rates vom 24. Juli 1986 zur Einführung der gemeinschaftlichen Weinbaukartei.*

L'indication des données au point 2 du présent formulaire est obligatoire et les données seront utilisées pour le calcul des cotisations de Sécurité Sociale pour l'année 2003.

Die Angaben unter Punkt 2 sind obligatorisch und dienen zur Berechnung der Beiträge zur landwirtschaftlichen Sozialversicherung für das Jahr 2003.

Le présent formulaire doit être rempli correctement et pour l'ensemble des parcelles viticoles exploitées par le chef d'exploitation. Des données erronées ou incomplètes peuvent mener à une diminution des primes demandées ou même à l'exclusion complète des primes concernées.

Das vorliegende Formular muss wahrheitsgemäss und für sämtliche vom Betriebsleiter bewirtschafteten Parzellen ausgefüllt werden. Falsche oder unvollständige Angaben können zu Prämienkürzungen oder gegebenenfalls zum Prämienausschluss führen.

Je certifie que les données sont exactes et complètes:

Ich bescheinige die Richtigkeit und Vollständigkeit der Angaben:

Ellenge August 2002

Lieu et date / Ort und Datum

JA

Signature / Unterschrift

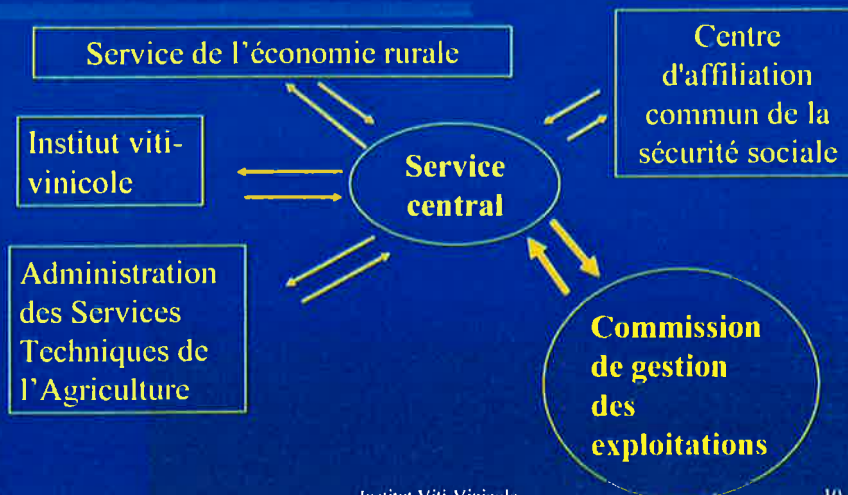
Systeme intégré



Institut Viti-Vinicole

9

Gestion des exploitations viticoles



Institut Viti-Vinicole

10

La parcelle viticole

Page 1/2
 Nombre de parcelles cadastrales composantes : 2
 Superficie en vigne : 0ha 13ar 77ca
 Superficie en friche : 0ha 00ar 00ca
 Pente moyenne en % : 15,0
 Terrasses : NON

Demande d'obtention de primes

Année 2002 Prime de replantation
 Année 2003 Restructuration et reconversion de vignobles

Mesures d'entretien dans le cadre de la prime à l'entretien de l'espace naturel et du paysage pour l'année 2002

FUMURE			ENTRETIEN DU SOL				Treuil	Code erreur
60 kg	70 kg	ouvert	enherbe	enherbe chaque 2 rang.	extensif	couverture sol		
X				X				

Superficies en vigne / en friche

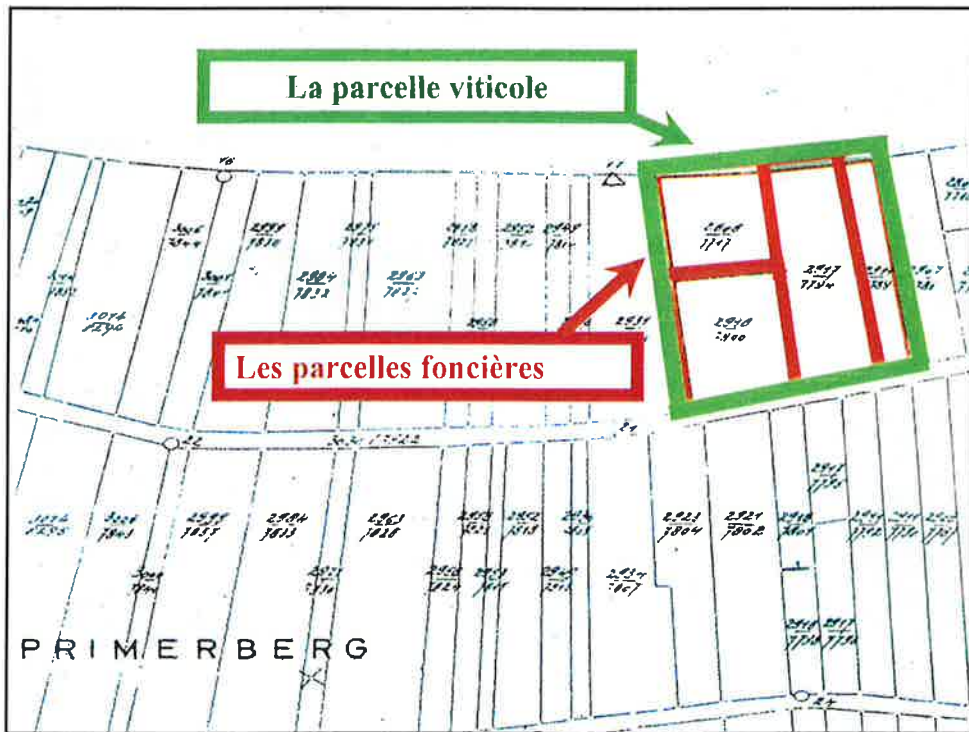
Cépage / friche	Superficie			Année de plant.	Date mise en friche	Mode de mécanisation			Mode de conduite		Distance e. rangs	Code erreur
	ha	a	ca			M	D	T	E	T		
1) Rivaner	00	13	77	1980			X			X	2,1	

Les parcelles cadastrales composantes

Parcelles cadastrales composantes

Codes communes REME REMERSCHEN
 Codes sections B REMERSCHEN

Réf.	Numéro cadastre et Lieu-dit	Surface cadastrale			Superficie cultivée			Mode F. V.	Code erreur
		ha	a	ca	ha	a	ca		
9772	REME B 3511 / 5639 IN BRUCH	00	11	03				FER	
9773	REME B 3535 / 4686 IN BRUCH	00	02	74	1	14		FER	



PC3270 - T03270

ESR View Construction Actions Window Help

N.R.C.A.R I MAGB NACRAGB NACAGB1 VVRB VVCWJB 30/10/02 13:16:18

Exercice :	La gestion des exploitations viticoles :		Validation :
Code :	Le fichier « clients »		l. Agri. S=Soc
Rep/Fus :			sonne
Nom :			668421
Prénom :			8153000160180
Adresse :			18887411549
Adr. cpl :			Mat. Chef Exploit. : 19490813112
Pays :	L Luxembourg		Mat. I.V.V. : 0000
Ville :	05690 ELLANGE		

Expl. à titre princ. :	0 - (IC>1999 et EP>2001) -	Retraité :	N	Mat. Chef :	19490813112
Registre des bov. :	1 Livre d'étable	Quota Lait :		Quota V. ALL :	
Nombre associé(s) :	1.0	Quota Ovins :			
P.D.R.	UT/A	UT/H-> Coef			
	23.0346 Ha	UF ->	UF/Ha	M.B.S. :	Euros
		UGB ->	UGB/Ha	R.P.A. :	Euros

OTE :

Validation (U/N) : _

PF1:Aide PF2:Mode PF3:Préc PF4:Liste PF7:Exp- PF8:Exp+ PF10:Compl. PF14:AutrePF

PC3270 - TN3270
 File Edit View Communication Actions Window Help

M.A.C.A.R.I | MAV3 MACRAV3 MACRAV3 VVAB VVCAVJB 30/10/02 13:22

Exercice: 2 | Page au: 30

La gestion des parcelles viticoles dans le casier viticole

153-160

+Choix+N. eq=Noviti+Comu+Sec S. cadast+Pente+T+S.utilis+S.planté+S.friche+Cod

9	5833	REME	B	15	10			15	10	15	10
10	5835	REME	B	11	50	15.0	N	11	50	11	50
12	5837	REME	B	13	77	15.0	N	13	77	13	77
13	5838	REME	B	19	57	15.0	N	19	57	19	57
15	6885	REME	B	08	90	15.0	N	08	90	08	90
16	1038	REME	C	11	00			11	00	11	00
17	3806	WELL	D	26	42			26	42	26	42
18	3807	WELL	D	16	48	30.0	N	16	48	16	48

C =parcelles Composantes E =mesures d'Entretien F =Fusion de 2 PV
 M =vigne Mère, pépinière N =Nouvelle PV (vide) P =Pentes et terrasses
 S =Suppression PV V =surfaces en Vigne X =changement d'exploita

PF1:Aide PF3:Préc PF7:Pge- PF8:Pge+ PF10:Renum PF11:Switch PF12>User ENTER:V

PC3270 - TN3270

M.A.C.A.R.I | MAVN MACRAVN MACRAVN VVAB VVCAVJB 30/10/02 10:51:20

Exercice: | Page au: 30 10

La gestion des parcelles viticoles: Les replantations

153-160

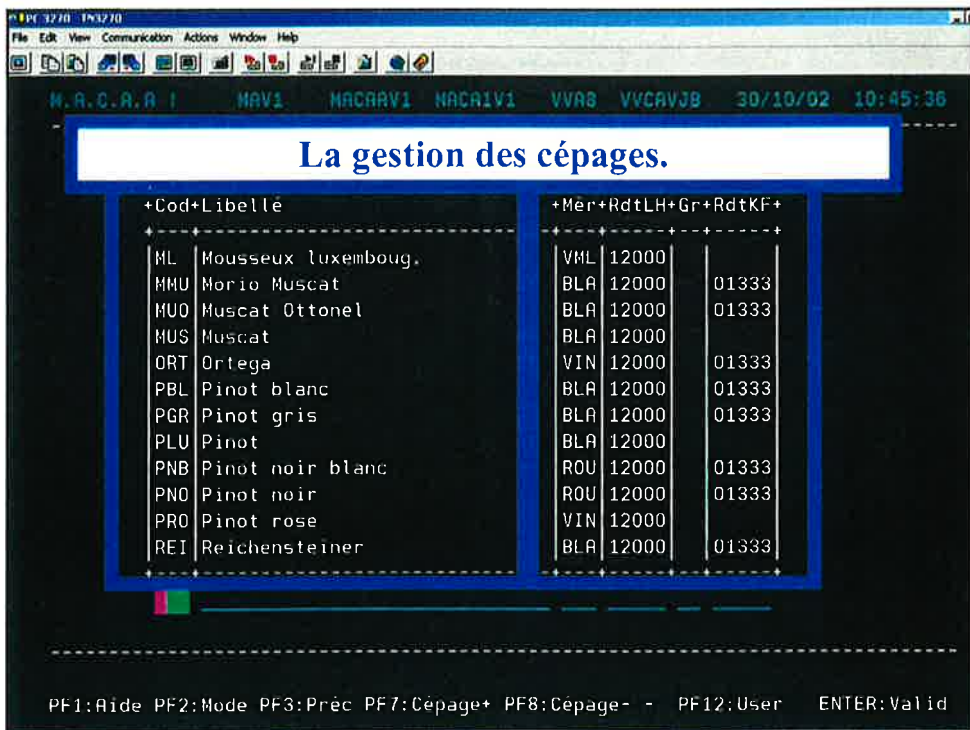
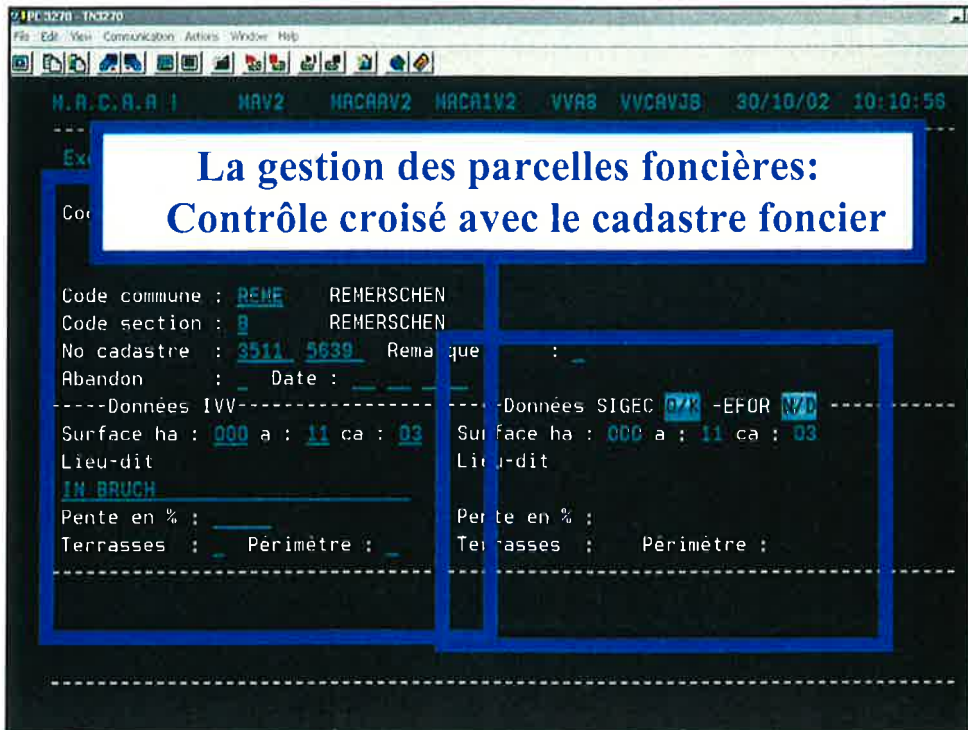
Parcelle viticole réf. : REME B 05837

-----Vigne d'origine-----

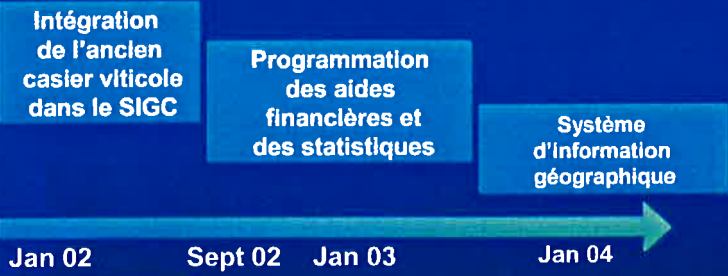
Numéro référence : 008057
 Code variété : RIV Rivaner
 Année de plantation : 1980
 Superficie 2002 ha : 000 ar : 13 ca : 77
 Superficie 2003 ha : 000 ar : 13 ca : 77

Numéro référence :
 Code variété :
 Année de replantation :
 Superficie replant.ha : ar : ca :

PF1:Aide PF2:Modc PF3:Retour PF12>User ENTER:Valid



Évolution du casier viticole dans le Système intégré de gestion et de contrôle



Institut Viti-Vinicole

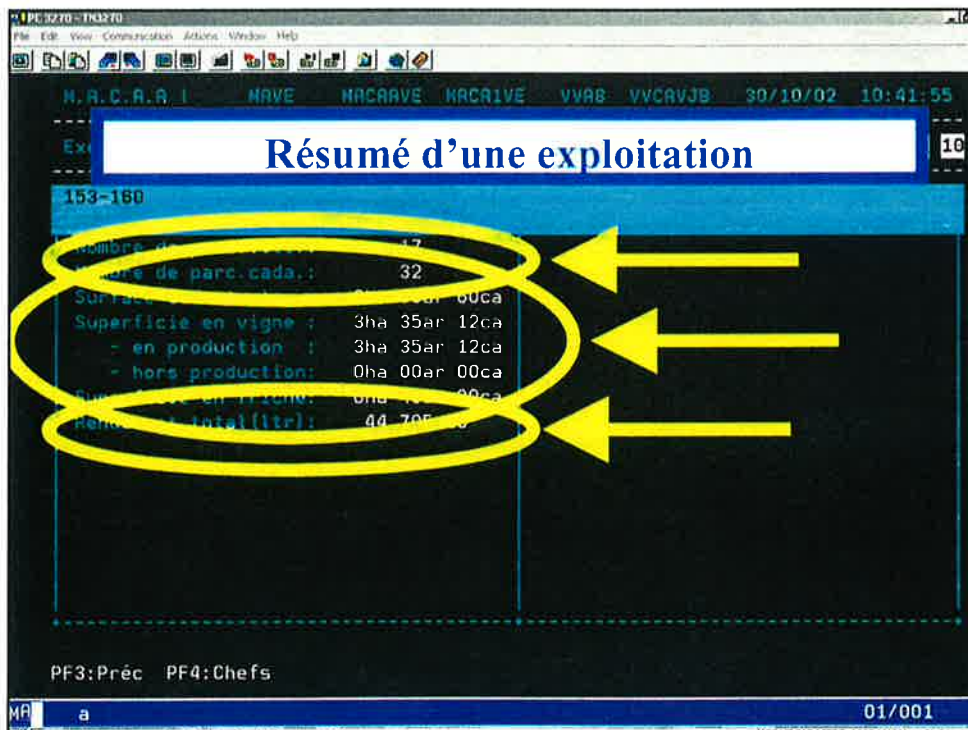
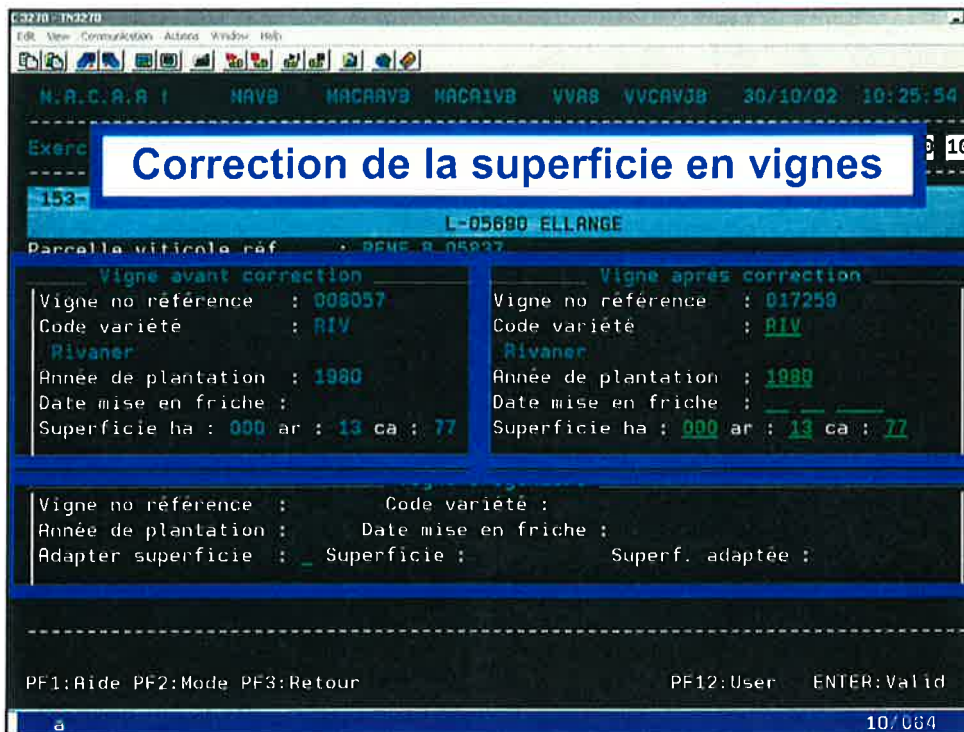
19

Historique des parcelles foncières

No cadastre : 3511_5639

Exercic	No viticole	odexpl	Nom	Prénom
2002	RENE B	583	53-160	
2001	RENE B	583	53-160	
2000	RENE B	583	53-160	
1999	RENE B	583	53-160	
1998	RENE B	583	53-160	
1997	RENE B	583	53-160	
1996	RENE B	583	53-160	
1995	RENE B	583	53-160	
1994	RENE B	583	53-160	
1993	RENE B	583	53-160	
1992	RENE B	583	53-160	
1991	RENE B	583	53-160	

PF3:Retour PF7:Page précédente PF8:Page suivante



PC3270 - T03270
 Fichier Edit View Communication Actions Window Help

M.A.C.A.R.I. MAV6 MACRAV6 MACRAV6 VVAB VVCAVJB 30/10/02 10:49:

Exer 153- **Changement d'exploitation d'une parcelle viticole**

Numéro viticole : 05837

No séquence parcelle : 012 Code commune : RENE Section : B
 Pente moyenne : 015.0 Terrasses : N
 Surface cadastrale ha: 000 ar: 13 ca: 77
 Superficie plantée ha: 000 ar: 13 ca: 77

-----NOUVEL EXPLOITANT-----
 Code exploitation : _____ Nom : _____

PF1:Aide PF2:Mode PF3:Retour PF12:User ENTER:Vali

angabeh zum Meldeo:

La déclaration de récolte

L - 5419
 Gesamt Rebfläche: 73222 m2

SOPH	Ribling	Rivaner	Auxerrois	Pinot blanc	Pinot gris	Pinot noir	Ri
1) REBFLÄCHE IM ERTRAG (m2): (eigene und gepachtete Weinberge)	9450	32864	8384	4063	6121	3043	
2) ERNTE 2001 IM BETRIEB GELAGERT (Hlter)	2000	18000	4200	1200	4000	4000	30
a) Tafelwein: b) Qualitätswein:							
3) ERNTE 2001 VERKAUFT (kg):	53514 kg	16320 kg	4012 kg	4443 kg	1052 kg		30

Die Richtigkeit und Vollständigkeit der gemachten Angaben bescheinigt

Unterschrift: Ehmen Ortschaft: _____ Datum: 24.11.2001

Angaben zum Betrieb:

La déclaration de rendement

Gesamte Rebfläche: 73222 m²

Sorte	Rebfläche	Revaner	Ausschuss	Pinot blanc	Pinot gris	Pinot noir
1) REBFLÄCHE IM ERTRAG (m ²): (eigene und gepachtete Rebflächen)	3450	12864	8384	4063	6121	
2) ERNTE 2001 (Liter)						
a) im Betrieb gelagert:	4000	18000	4200	1200	4000	
davon 1 Tafelwein:						
2 Qualitätswein:	2000	18000	4200	1200	4000	
b) verkauft:	4000	12371	3017	501	791	
c) total (2a + 2b):	8000	30371	7217	1701	4791	
3) HEXTERREINIGUNG: (Erlöse pro ha) (2a + 1)	6408	9211	8608	11175	7827	
4) a) ERNTERESULTAT (Liter pro ha)		12000				
b) Total Rebfläche (m ²):		42314				
c) Erlaubte Menge (Liter) (3a + 4b):		59260				
d) tatsächliche Menge (Liter) (2c + 2d):		26527				
e) Realmenge (Liter) (4c - 4d):		28274				

État d'avancement actuel

Vue d'ensemble des réalisations par rapport au calendrier

- En retard dans le secteur formulaires
- En retard dans le secteur statistiques
- En avance dans le secteur primes

Retards et problèmes imprévus

- Retards principalement dus à des sous-estimations de la charge de travail



Projet SIG

Provisoirement sur base cadastrale pour gérer les contrôles:

- ❖ **Orthophotos**
- ❖ **Plan cadastral digitalisé**





EUROPEAN COMMISSION
DIRECTORATE GENERAL JRC
JOINT RESEARCH CENTRE - ISPRA
Institute for Protection and Security of the Citizen
MARS Unit

Session 2 – Presentation of the Vineyard Register in the United Kingdom, by John Boodle, Wine Standard Board, London

Abstract

M. Boodle is responsible of Vineyard Register at the Wine Standard Board (WSB) which is the competent authority for the wine sector regulation. The vineyard in UK is recent (1950's) but it gradually increased over the 500 ha which is the limit for Vineyard Register obligation (however no aid schemes/controls are applied in UK). Therefore the WSB bought a new computer and designed register form; the database (Access) is based in London. The VR was completed in 1992 and covers 450 vineyards and 992 ha. An update was done in 1997. Each single vineyard is visited each 1-4 years.

The Vineyard Register Forms contain 3 parts, the holdings, the individual parcels and the vine varieties. For each parcel the area and the physical characteristics are stored in the database. Only alphanumeric data are managed. The WSB planned to do some tests with satellite images in 2001 but due to very high cost compared to accuracy it was not achieved. Given the limited vineyard areas (which are unlikely to increase) there is no real plan to move to Vineyard GIS.

It was emphasised by the Commission that there is no link with LPIS at the moment, since the IACS reference system (based on Ordnance Survey maps grid) is not used in the Vineyard Register.

(Presentation Powerpoint)



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MARS Unit

Land Parcel Identification System
ISPRA : 6 -7 November 2002

The Vineyard Register in the United Kingdom

John Boodle, Wine Standards Board

Introduction

The Wine Standards Board

- Competent authority for wine sector regulations
Set up in 1973 - UK joins EEC
- Funded by Department of Environment Food and Rural Affairs (DEFRA) and the Vintners Company
- regulates importation and wholesale of wines in the UK (member states and third countries)
- Responsible for wines produced in the UK

Vineyards in UK – Brief History

- Difficulties of climate
- Commercial viability – bigger vineyards
- Pioneers retire
- Pioneers mid 20th century
- Gradual growth
- English Vineyards Association 1967 (now UKVA)

Vineyard Register 1989-1992

- registration 1989-1992
- Completion of forms
- Purchase of new computer
- Database input
- Regulations 2392/86, 649/87
- Survey – over 500 ha
- Design of Register form

Register – European Commission

- changes to Register
future role?
 - inventory of
production potential
Restructuring,
conversion
 - 25,000 hl minimum
- June 1992 report
450 vineyards
992 hectares
 - 1997 report
data update 1-4 years

Vineyard Register Forms (1)

- Three sections
 - o Holding and ownership
 - o Details of individual parcels
 - o Details of vine varieties and husbandry
- self copy format for holder and WSB
- Signature of holder on Section I

Vineyard Register Forms (2)

- Holding and ownership: Section I
 1. Name and address of vineyard
 2. Name and address of holder
 3. Areas
 - Total agricultural area
 - Area of vines – open/under cover

Vineyard Register Forms (3)

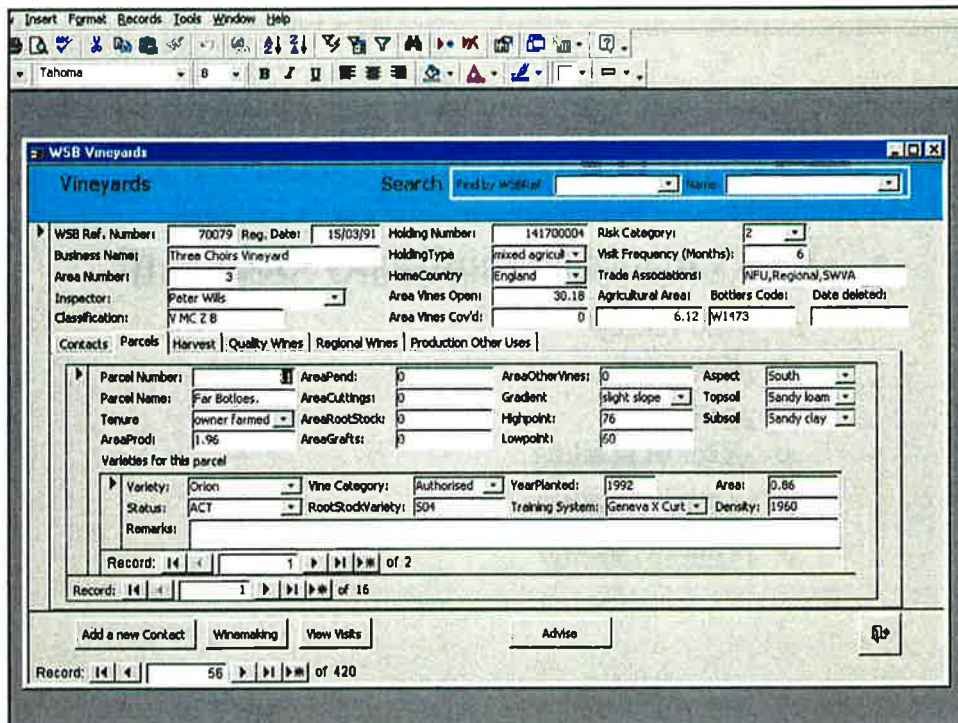
- Details of individual parcels: Section II
 - o Area in production/not in production
 - o Aspects of parcel
 - Gradient, altitude, aspect, soil type
 - o Data for nurseries
 - Little relevance to UK

Vineyard Register Forms (4)

- Vine varieties and husbandry: Section III
 - o Vine variety
 - o Rootstock
 - o Area
 - o Year of planting
 - o Training system
 - o Planting density

Transfer to Database

- Access database, with Excel reports
- 3 main reports
 - Vineyard
 - Parcels
 - Varieties
- Other reports
 - Include deletions and new registration
- Previously forms to London, data entered on Dataease programme
- Now inspectors enter details on laptop computer in home office
- Data synchronised weekly with main database



Main Reports

- Vineyard
 - Name
 - Classification
 - Vineyard
 - winery
 - contract bottler
 - Abandoned
 - Date of next visit

Extract : Vineyard Report

Inspector	reference	vineyard	type	Inspector area
Roger Corbett	70628	Beeches Vineyard	V	Wales & West Midlands
Peter Wills	70026	Beenleigh Manor Vineyard	V M	South West
Julian Taylor	70617	Bensgrove Farm Vineyard	V	South Central
Michael Horswill	70199	Bowl Water Vineyard	V	South East
Michael Horswill	70235	Biddenden Vineyard	V MC Z	South East
Julian Taylor	70638	Binfield Vineyard	V	South Central
Michael Horswill	70431	Birchden Vineyard	V	South East
Peter Wills	70537	Bishops Tawton Vineyard	VA	South West
Julian Taylor	70092	Bishops Waltham Vineyard	V	South Central
Michael Horswill	70265	Bookers Vineyard	V M	South East
Peter Wills	70612	Bosue Vineyard	VM	South West
Julian Taylor	70182	Bothy Vineyard	V MC	South Central
Peter Wills	70465	Bottle Green Drinks Co	M Z	South West
Peter Wills	70599	Bow In the Cloud Vineyard	V	South West
Peter Wills	70120	Bowdens Crest Ltd	V	South West
Julian Taylor	70183	Boze Down Vineyard	V	South Central
Peter Wills	70478	Bradley Cross Vineyard	VH	South West

Extract – Parcels

WSB ref	Vineyard	Parcel No.	area
70079	Three Choirs Vineyard	9	1.64
70079	Three Choirs Vineyard	13	1.44
70079	Three Choirs Vineyard	11	1.96
70079	Three Choirs Vineyard	15	0.16
70079	Three Choirs Vineyard	12	1.76
70079	Three Choirs Vineyard	16	0
70079	Three Choirs Vineyard	7	2.55
70079	Three Choirs Vineyard	8	2.28
70079	Three Choirs Vineyard	4	2.01
70079	Three Choirs Vineyard	6	0.56

WSB Infringements

Reporting WSB Reference no.:

Infringement details

WSBRef:	Trader / Vineyard:	Product	Country	Error:	Qty:	Unit Size:
7304	The Wine Domain (web			0	0	0

Willhayne Vineyard

Record: of 1

ReportComments:

I visited this new Vineyard and met both David and Kathryn Baxendale. I obtained details of the Vineyard from Vigo who had sold to me. I recorded details on WSB 13 and have created a new Vineyard file on the database. Bacchus, Phoenix and Pinot Noir have been planted so far. Further plantings will take place next year. I walked around the Vineyard situated in a very pleasant location. It looked as if a great deal of care had been given. Mr. Baxendale has already attended a course at Plumpton and intends eventually to have his own Winery. I explained details of the WSB and discussed legislation and other related subjects. I recommend a classification of V 'O'.

Peter WILLS

WSB Vineyards

Vineyards Search

WSB Ref. Number: Reg. Date: Holding Number: Risk Category:

Business Name: Holding Type: Visit Frequency (Months):

Area Number: HomeCountry: Trade Associations:

Inspector: Area Vines Open: Agricultural Area: Bottlers Code: Date:

Classification: Area Vines Cov'd:

Contacts **Parcels** **Harvest** **Quality Wines** **Regional Wines** **Production Other Uses**

Parcel Number: **AreaPend:** **AreaOtherVines:** **Aspect:**

Parcel Name: **AreaCuttings:** **Gradient:** **Topsol:**

Tenure: **AreaRootStock:** **Highpoint:** **Subsol:**

AreaProd: **AreaGrafts:** **Lowpoint:**

Varieties for this parcel

Variety:	Parcel Recours:	Vine Category:	YearPlanted:	Area:
ACT	ACT	Authorised	1995	1.42
		RootStockVariety:	41B	Density:
		Training System:	Single Guyot	2745

Remarks:

Record: of 4

Record: of 2

Vine Varieties example

70598	Ridgeview Estate Chardonnay	ACT	Authorised	1.4	1995
70598	Ridgeview Estate Chardonnay	ACT	Authorised	1.48	1995
70598	Ridgeview Estate Pinot Noir	ACT	Authorised	0.73	1995
70598	Ridgeview Estate Pinot Meunier	ACT	Authorised	0.48	1995
70598	Ridgeview Estate Pinot Meunier	ACT	Authorised	1.42	1995
70598	Ridgeview Estate Pinot Noir	ACT	Authorised	0.97	1995

Data From Vineyard Register

Size class of area under vines (ha)	Holdings	AA	Area under vines (ha)
	1	2	3
< 0.1			
0.1<0.2	18	308.63	2.41
0.2<0.3	34	503.4	7.39
0.3<0.5	51	1239.11	19.49
0.5<1	72	1807.12	49.7
1<2	92	3250.64	103.54
2<3	44	2491.83	65.69
3<5	25	1246.19	85.14
5<10	21	1047.59	125.88
10<20	10	597.91	121.97
20<30	2	202.3	52.64
30>	3	417.68	171.2
		13112.4	805.05

Key
AA – Agricultural Area

Satellite Photography

- British National Space Centre – 2001
- £4000 per 60km²
- Accurate to 2 hectares
- Expensive for limited use

Conclusion

- Area unlikely to increase
- Planting measures unlikely
- No aid schemes/controls apply
- Use /improvement of database