



*1. MRW – Ministère de la région  
Wallonne / Ministry of the Walloon  
Region*

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DGA – Direction Générale de  
l’Agriculture / Directorate General  
for Agriculture





## *2. SAGRIWATEL*

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Monitoring of the Walloon  
agricultural state with remote sensing :  
project management and benefits for  
the department of agriculture





### *3. Before 2002*

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#### **★ Federal Authorities**

★ Ministry of Small Enterprises, Traders and Agriculture

★ Paying Agency Federal EAGGF

#### **★ Regional Authorities**

★ Ministry of the Walloon Region Directorate General for Agriculture

★ Paying Agency Regional EAGGF



## *4. After 2002*

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### **★ Regional Authorities**



**★ Ministry of the Walloon Region –  
Directorate General for Agriculture**



**★ Only one Paying Agency  
Regional EAGGF**



## *5. Research projects*

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★ 10/1985 – 09/1989 : TELSAT I Diseases  
and yields



★ 01/1989 – 12/1992 : TELSAT II  
Agricultural production





## *6. Experimental studies*

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★ 04/2002 – 12/2002 : MARS Project – Regional inventory of Belgium

★ 10/1993 – 10/1995 : TELSAT III Remote sensing and IACS – RUG



★ 10/1993 – 10/1995 : TELSAT III Remote sensing and IACS – KUL



★ 12/1996 – 11/1998 : TELSAT IV Integration of multisource image data within IACS

★ 12/1999 – 06/2001 : TELSAT IV Integration of RADAR within IACS

★ 01/2003 – 08/2005 : SAGRIWATEL



## *7. Experimental studies*

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★ PCNOSW : numerical cartography of the ground occupation



★ ERRUISSOL : numerical cartography of runoff and erosion risks



★ PCNSW : numerical cartography of the pedology



## 8. Agricultural online map of the parcels



The screenshot shows the CTSGraph - CTS 2000 software interface. The main window displays an aerial map of agricultural parcels. A parcel is highlighted in red and labeled '6'. Other parcels are labeled with numbers like 27, 33, 41, 5, 8, and 12. The interface includes a menu bar (Fichier, Vues, Fenêtres, Aide), a toolbar with various navigation and editing tools, and a status bar at the bottom. The status bar shows the following information:

Image 256 niveaux de gris  
Culture: Froment d'hiver  
Pixel R: 101 G: 101 B: 101  
Surface déclarée: 1 ha 50 a  
R: 1/1 - 1.00 m/p  
Surface: 1 ha 50 a 17 ca 8.841 cm2  
R-G-B  
8 points  
Point: X: 210.053,00 - Y: 141.218,00 - Zoom: -1  
Périmètre: 521,53 m.  
points

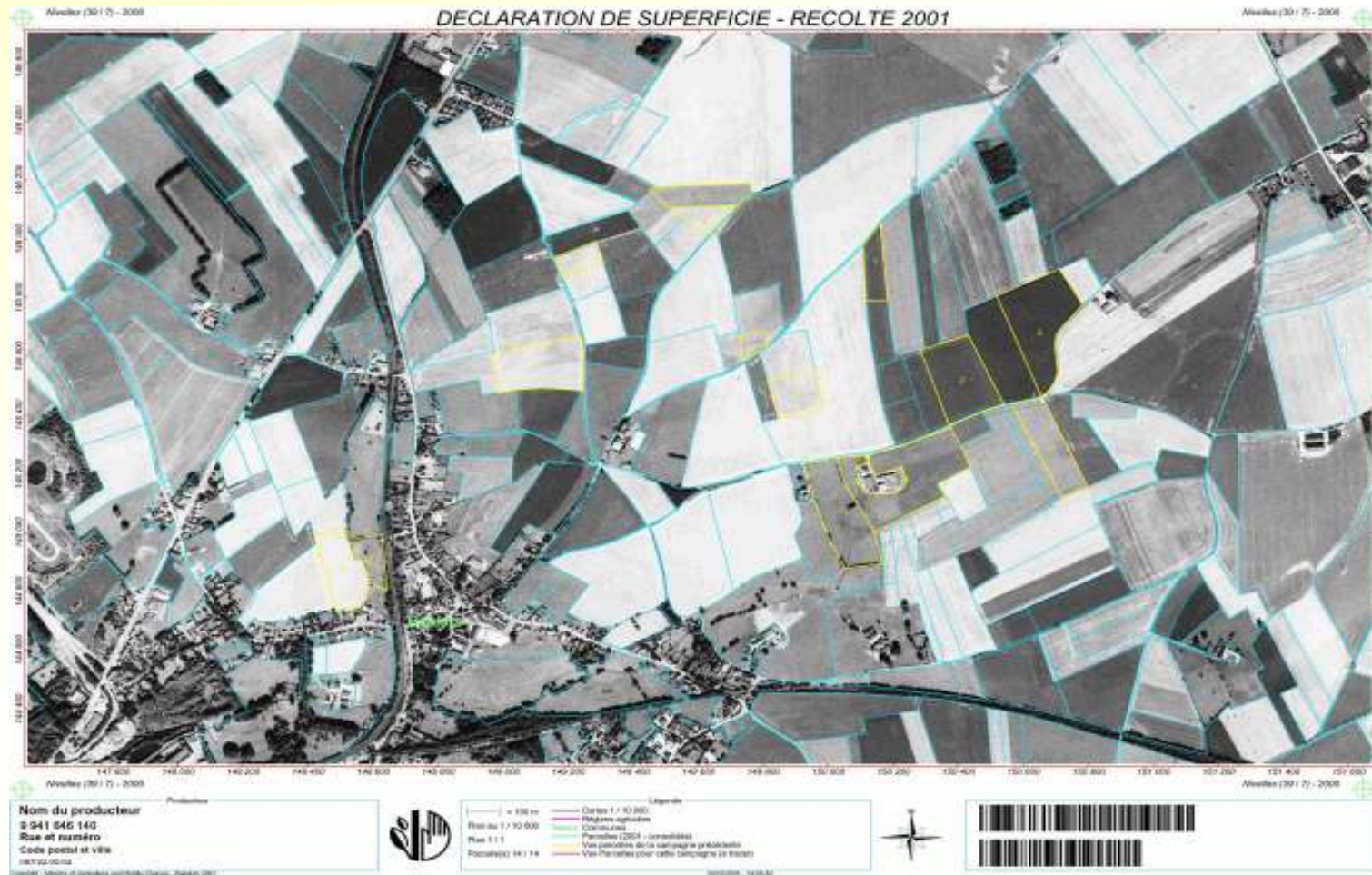
The 'Informations' window is open, showing the following data:

Identification	% Redondance 1 -> 2	% Redondance 2 -> 1
Condroz	100.000 %	.....





# 9. Orthophotoplans





## 10. Control by remote sensing

The screenshot displays the CTS 2000 software interface for remote sensing analysis. The main window shows three satellite images of a field parcel, each with a yellow dashed outline indicating the area of interest. The images are labeled as follows:

- 13 - Satellite Image - SCLAYN - SPOT2 - 29 Juillet 2001 R-G-B
- 11 - Satellite Image - SCLAYN - LANDSAT5 - 25 Juin 2001 R-G-B
- 12 - Satellite Image - SCLAYN - SPOT2 - 11 Mai 2001 R-G-B

A dialog box titled "Diagnostic de culture par photo-interprétation" is open, displaying the following information:

Classification	Dossier	Parcelle n°
→ 1	99-41938352	15

Below the table, the "Culture :" section shows the following options:

- Déclaré : 321 - Orge d'hiver (Probabilité : 0.00)
- Classifié 1 : 201 - Maïs ensilage (Probabilité : 89.50)
- Classifié 2 : 202 - Maïs grain (Probabilité : 8.50)

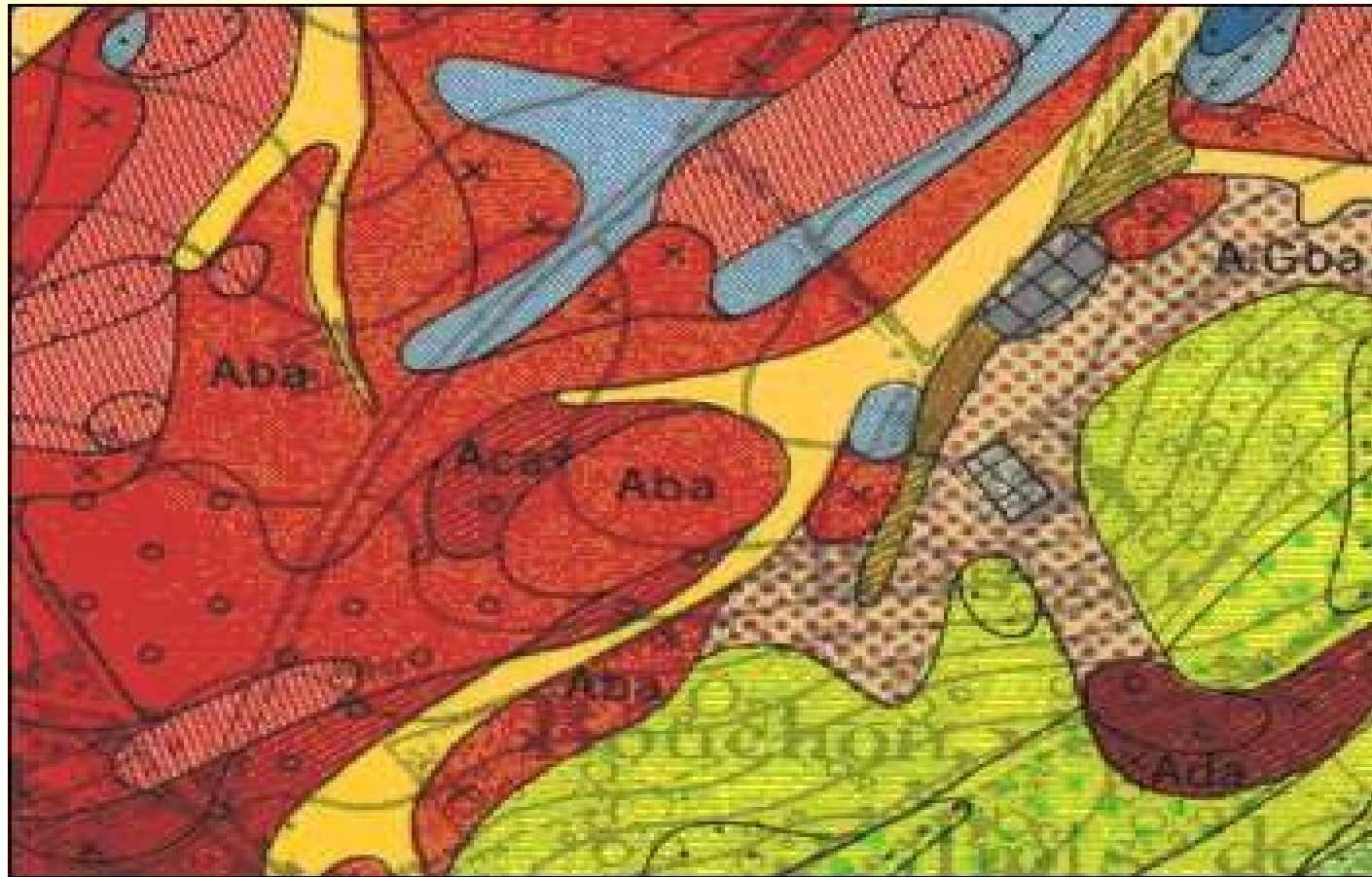
The "Confirmé :" field is set to "201 - Maïs ensilage". The "Vérité terrain :" field is set to "78".

The status bar at the bottom of the window displays the following information:

Image 256 niveaux de gris | Pixel R: 230 G: 220 B: 10 | R: 1/2 - 2.00 m/p | R-G-B | Point: X: 197.950,00 - Y: 118.937,00 - Zoom: -1 | NUM



## *11. The map of soils*





## *12. Indicators*

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★ **Examined indicators : 19**



★ 3 are studied

★ 9 are in development

★ 7 are developed





## *13. The hit parade*

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★ Grassy headlands

★ Bare soils during winter



★ Agrometeorological bulletin

★ Crop sequences



★ Ecological network elements

★ Water stresses monitoring



## *14. Les domaines d'application*

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★ Control

★ Supervision



★ Help to decision





## *15. Development stages*

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1. Study (Research **and** Administration)
2. Development (Research **with** Administration)
3. Operationalization (Administration **with** Research)
4. Production (Administration)





## *16. DGA means : data*

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★ IACS : Integrated Administration and Control System



★ The producers

★ The animals

★ The parcels



★ Different cartographic data sources





## *17. DGA means : infrastructure*

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★ Servers and databases

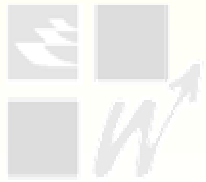
★ Computers



★ Fast network

★ Softwares – GIS

★ Applications





## *18. DGA means : organization*

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★ Security plan

★ Projects management



★ Own IT

★ Projects management

★ Technical implication



★ Management implication



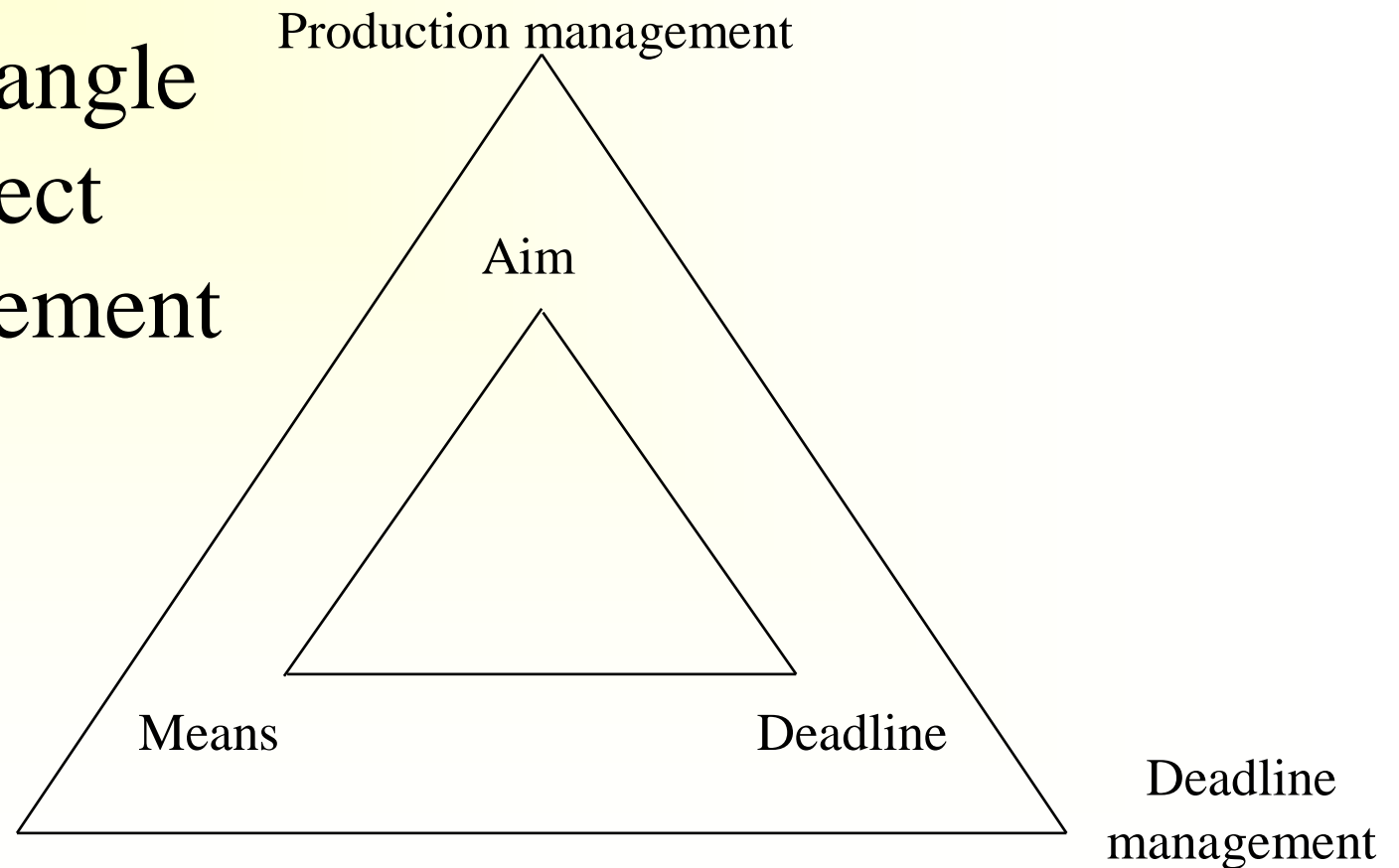
## *19. Bases of the projects management*



The triangle  
of project  
management



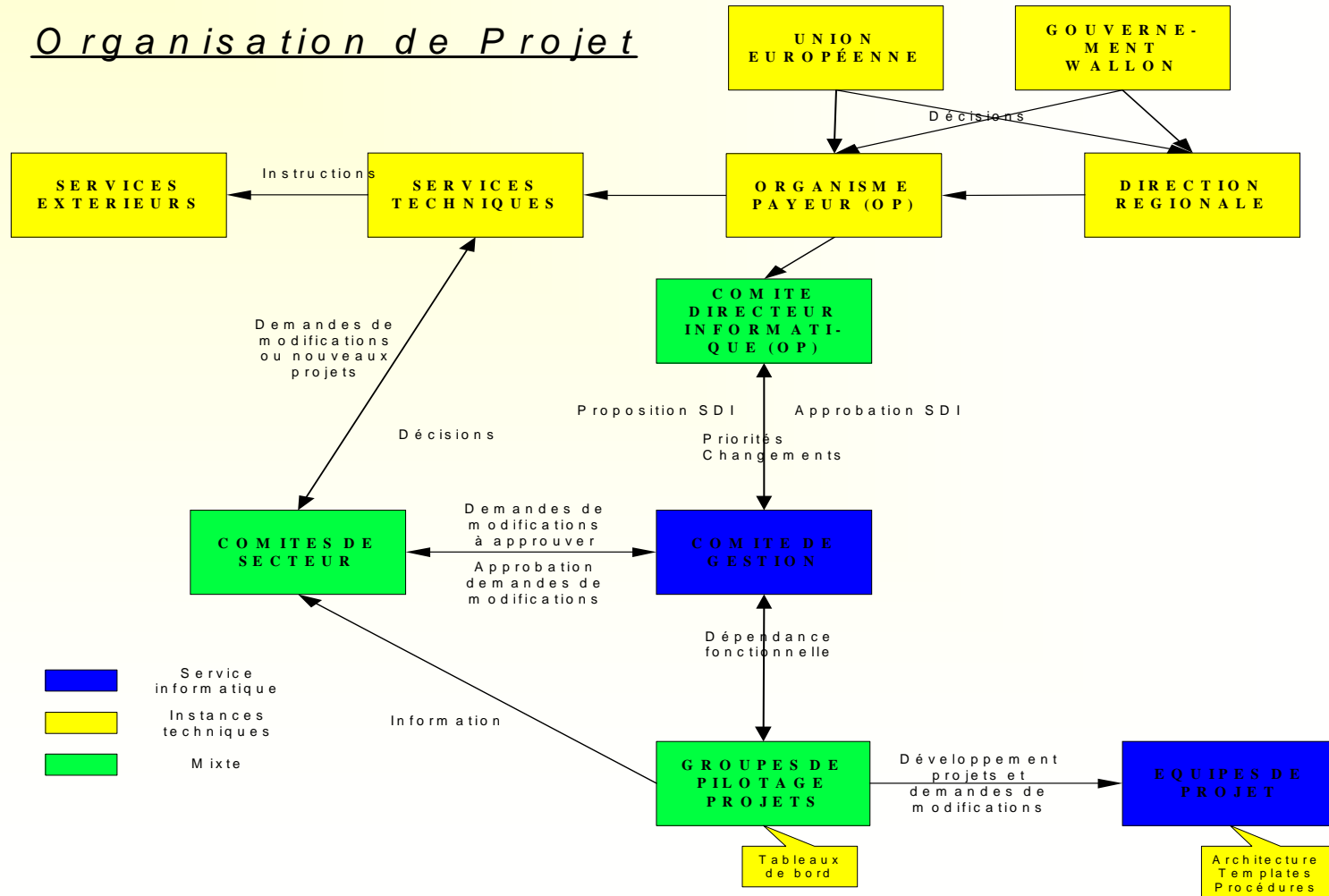
Resources  
management





# 20. Process of projects management

## Organisation de Projet





## *21. Schedule*

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★ SAGRIWATEL I : final report

★ SAGRIWATEL II : 10/2005 – 09/2006

★ SAGRIWATEL III : ?



Long-term plan

DGA – SSTC - Others





## *22. Conclusions*

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★ Concrete applications

★ R&D plan for the DGA

★ To intensify the synergy between Research and Administration

