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Monitoring Agriculture with Remote Sensing Unit

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## COMMON TECHNICAL SPECIFICATIONS

#### FOR THE 2002 CAMPAIGN OF

# REMOTE-SENSING CONTROL OF ARABLE AND FORAGE LAND AREA-BASED SUBSIDIES

#### CHANGES WITH RESPECT TO PREVIOUS CAMPAIGN

Revisions in document Ref. GL/G03/M2903/01 (Common Technical Specifications for the **2002 Campaign** of remote-sensing control of arable and forage land area-based subsidies", of 30 November 2001, related to O.J. publication no. 2001/S 232-159265 of 1 December 2001) in comparison to document (Ref. GL/I04/M2556/2000 of 24 November 2000, O.J. publication no. 2000/S 226-146021).

This document lists all revisions that are related to the new elements introduced for the 2002 campaign, and have found their way into the ITT document no. 2001/S 232-159265 (Ref. GL/G03/M2903/01 of 30 November 2001). Revisions are relative to the document for the 2001 campaign (document no. 2000/S 226-146021, Ref. GL/I04/M2556/00 of 24 November 2000).

This document is made available for the convenience of those bidders that are already familiar with the document for the 2001 campaign. It should be used together with the referenced documents. This document is merely a guide to allow the rapid comparison of the previous and current versions of those parts of the text that have been changed. It maintains the numbering and outline of the reference document. Additions are highlighted in red typeface, deletions in red double strikethrough typeface. Wherever consistency requires this, complete sections have been kept intact, with only the changes highlighted. The use of ellipses (...) identifies parts of the document that remain unchanged.

In any case, only the document Ref. GL/G03/M2903/01 of 30 November 2001 (O.J. publication no. 2001/S 232-159624 of 01 December 2001) is authoritative.

1.	INTRODUCTION	2
	OVERVIEW	
	PRELIMINARY WORK	
	PREPARATION OF DATA	
	PHOTO-INTERPRETATION OF APPLICATIONS	
	DECISION RULES AND TECHNICAL TOLERANCES	
7.	ADMINISTRATIVE ORGANISATION	13
	GENERAL RECOMMENDATIONS	
	TECHNICAL OFFER	
	PRICE PROPOSAL	

#### **Pre-amble**

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#### 1. Introduction

1.1 The majority of the European Union Member States, in co-operation with the European Commission, will use Remote Sensing in 2002 to control at least a part of the subsidies for the arable and forage areas funded by the EAGGF. Although the present Technical Specifications have been prepared jointly by the Member States and the Commission, each Member State is responsible for carrying out the work on its territory.

The following Member States participate in this Invitation to Tender: France, Germany, Greece, Portugal and the United Kingdom. On the other hand, Belgium, Denmark, Finland, Ireland, Italy, the Netherlands, Spain and Sweden also use remote sensing and will follow these common Technical Specifications, but in a multi-annual programme that is not concerned by the present ITT. Austria and Luxembourg do not participate in the programme this year. The volume of work and requirements specific to each participating Member State are described in Annex 1 and in a "National Addendum" (see § 8.7).

- 1.2 Remote sensing may be used for the control of the following area-related payments:
  - Payments for certain arable crops based on Council Regulation (EC) No 1251/1999 (O.J. L 160, p. 1)<sup>1</sup>. This Regulation sets out the details of the system of area aids as compensatory payments to farmers for the loss of income caused by the reduction of institutional prices. This system was first introduced as part of the reform of the Common Agricultural Policy (CAP) in 1992.

In principle, the EC still pursues the same approach in the latest CAP-reform-package (Agenda 2000), of which the aforementioned Regulation forms part.

- This regulation provides for area-based subsidies for various kinds of crops falling within the "crop groups" cereals, oilseeds, protein crops, flax and (as of 1 January 2001) hemp grown for fibre. Different factors have to be taken into account for the calculation of the area aid, such as the regional average yield, as set out in regionalisation plans established by the Member States and the national or regional base-area. This is on condition that a minimum percentage of the arable land declared by the farmer is set aside. This percentage is now fixed at a basic rate of 10%. A voluntary set-aside of more than the required area is possible.
- Producers who apply for subsidies for land under cultivation capable of producing not more than 92 tonnes of cereals according to the regional average yield are exempt from this set-aside obligation. Such producers may, however, set-aside land on a voluntary basis nonetheless. A farmer can decide not to request aid for part of his land, or to declare a part of his eligible crops as a forage area, as a way of falling within this group of producers and hence being exempt from the set-aside obligation.

Further details concerning these measures are to be found in Commission Regulation (EC) No 2316/1999.

- In addition Council Regulation (EC) No 1254/1999 (O.J. L 160, p. 21) provides for various premiums for livestock. These premiums are limited by the application of a stocking density on the holding per hectare and calendar year (calculated as livestock units (LU) compared to forage area).
- Area-related payments for agricultural production methods designed to protect the environment and to maintain the countryside and for certain measures in relation to forestry, based on Council Regulation (EC) No 1257/1999 (O.J. L 160, p. 80). This regulation is the general basis for the rural development policies of the EC.

All the EC Official Journals, as well as other documents published by the EU, can be obtained in Member States from the National Services responsible for the distribution of the said publications. Electronic versions of Council and Commission regulations can be found at <a href="http://europa.eu.int/eur-lex/">http://europa.eu.int/eur-lex/</a>

Most of the terms between double quotes ("...") in this introduction are defined in the regulations.

- Compensatory payments for rice-producers as provided for in Article 6 of Council Regulation (EC) No 3072/95 (OJ L 329, p. 18) on the common organisation of the market in rice.
- A hectare-based subsidy for certain grain legumes (lentils, chickpeas and vetches) based on Council Regulation (EC) No 1577/96 (O.J. L 206, p. 4).
- A simplified scheme as provided for in Article 2 a of Council Regulation (EC) No 1259/1999 (O.J. L 173, p. 1-4).
- 1.3 ...
- 1.4 ...
- 1.5 ...
- 1.6 ...

## 2. Overview

- 2.1 ...
- 2.2 ..
- 2.3 ...
- 2.4 ...
- 2.5 ...
- 2.6 ....
- 2.7 The work procedure is similar in all participating Member States. The tasks will be carried out partially by the National Administration, the contractor and the Commission. The principal stages can be summarised as follows:

Table 1. **Main stages** 

Responsible	Description	Period				
	Preliminary work (§ 3, page 4)					
Administration	Choice of control sites, assessment of image requirements	September-November				
Administration	Call for tenders, selection of contractors, signature of contracts	December- March				
Administration Selection and administrative processing of applications lodged in chosen sites; transfer to contractors of dossiers and data bases (declarations, and possibly Land Parcel Identification Systems)		April- June				
Contractor	digitisation of parcels declared					
	Preparation of data (§ 4, page 4)	T				
Commission/	Acquisition of a set of images (Commission) and/or aerial photographs	September -				
Contractor (contractors), processing, geometrical correction etc.		November, March - July (August)				
	Photo-interpretation of applications (§ 5, page 10)					
Contractor	Photo-interpretation of parcels to be checked on images or photos	May- August				
	Decision rules and technical tolerances (§ 6, page 8)					
Contractor Categorisation and return of dossiers and results		June- August				
Administrative organisation (§ 7, page 19)						
Administration	Inspection on the spot of problem parcels	July- October				
Contractor	Contractor's report to Administration and discussions of results	October- November				
Commission Quality assurance O		October - February				

## 3. Preliminary work

The majority of this preliminary work is the **responsibility of the Administration** and is outlined for information only.

#### 3.1 Selection of control sites

- 3.1.1 ...
- 3.1.2 The selection criteria for these sites will be entirely at the discretion of the Administration and will not be discussed with the contractor. In general, the sites to be controlled are selected taking account of appropriate risk factors to be determined by the Member States, the parcel measurement tolerances and regional conditions. Although it is not possible to describe these sites in detail, the bidder should use the following information to evaluate the work. The sites to be controlled:
  - by satellite will be defined, in general, as a circle with a radius of maximum 25 km and will never cross national boundaries. They will be selected in order to ensure that a minimum number of dossiers are processed, e.g. between 500 and 1,500, or a minimum area is controlled, e. g. 10,000 to 20,000 ha. There could be specific cases in which the size or the shape of the sites differs from the above standard measures;
  - by aerial photographs could be distributed inside administrative boundaries, as a function of optimised flight plans and administrative units (e.g. communes) to be checked.
- 3.1.3 ...

#### 3.2 Selection of dossiers

- 3.2.1 ...
- 3.2.2 The "area" based aid applications for the 2002 campaign will be submitted, in principle, before 31 March, but this may be extended in certain Member States to 15 May. Modification to applications may be allowed up to 15 June, depending on the Member State. The definitive situation will not be known until the beginning of 2002.
- 3.2.3 Member States shall apply the following risk-criteria for the selection of applications to be checked on the spot, in accordance with Article 6 of Commission Regulation (EC) No 3887/92.
  - the amount of aid involved,
  - the number of agricultural parcels and the area for which aid is requested,
  - changes from the previous year,
  - the findings of checks made in past years,
  - other factors to be defined by the Member States.

Dossiers within each site will be selected preferably according to their geographical proximity, in order to avoid excessively large control zones, and thereby reducing the number of topographic maps and references required, and optimising the number of satellite images and aerial photographs. This will also permit the cross-checking for parcel overlaps and multiple declarations in different applications.

#### 3.3 Administrative checking of the sample

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## 4. Preparation of data

A number of possible alternatives can be considered in order to obtain the necessary image material for photo-interpretation:

- multitemporal satellite images: optical (panchromatic or multispectral) or radar images (to complement or replace missing optical images);
- aerial photos: several options are acceptable: in black-and-white, true colour or colour-infrared (CIR) mode, acquired during the current year or archive images (in particular, orthophotos used for the national Land Parcel Identification System (LPIS) can be used), mono- or multi-temporal coverage;

Remote-sensing Control of Arable and Forage Land
 or a combination of both types.

It is highly recommended that the choice be made according to local conditions, in agreement with the Recommendations of DG AGRI on the accuracy of area measurements<sup>3</sup> (i.e. satellite images can only be used without aerial photographs in regions where the objective of a 5% accuracy for at least 50% of the area checked is still met). If the choice is not imposed by the Administration, the tenderer must indicate and justify in detail his choice, with possible different alternatives according to local conditions. Some options, such as mono-temporal controls using satellite images or archive aerial photographs with no year 2002 flight, are not recommended strategies. The tenderer should carefully consider all consequences of his choice, in terms of price, area measurements (pixel size), or land use determination (radiometry and number of images).

## 4.1 Acquisition of satellite images

- 4.1.1 ...
- 4.1.2 ..
- 4.1.3 ...
- 4.1.4 During the 2002 campaign, selected sites may be supplied with very high-resolution (VHR) images acquired by the IKONOS satellite (PAN or 3 channel Pan-sharpened Multispectral (PSM)). As these data are rather costly, priority will be governed by budgetary constraints and arranged in close coordination with the Administration. Contractors are expected to use successfully acquired data as much as possible in an operational mode (rather than experimentally, as in the previous campaign).
- 4.1.5 ..
- 4.1.6 ..
- 4.1.7 ...
- 4.1.8 The sensors, the windows and the optimal number of images for the Member State concerned should be discussed in detail by the tenderer. He will take into account the necessary compromise between the acquisition of late images in 2002 for better discrimination of the spring sown crops, and the need to provide early results, in order to allow the Administration to carry out on-the-spot checks before the harvest. The tenderer may differentiate by region and justify a possible preference for XI/XS, ETM+/TM, LISS-III, ERS SAR or RADARSAT. The Commission will evaluate the justification and try to satisfy this preference, taking into account the acquisitions already made and availability of actual imagery.
- 4.1.9 ..
- 4.1.10 ...
- 4.1.11 The images will be bought by the Commission and supplied free to the contractor, at the latest 10 working days after the acquisition (SPOT), and after the order (other sensors). These data remain Commission property and will be returned at the end of the work. The images will be supplied preferably on compact disk (CD), if not on magnetic tape (CCT), after agreement between the contractor and the Commission. The images will be delivered to one single address as stated by the contractor, with all costs paid by the Commission, except local taxes. They will be in standard format (level "1A" or "1B" for SPOT, "raw" or "system corrected" for LANDSAT and IRS, "PRI" for ERS and "Fine beam path image" for RADARSAT, and as "CARTERRA Geo product" for IKONOS). Data formats for Very High Resolution sensors will be decided on a case by case basis, but are typically for non-ortho-rectified

<sup>&</sup>lt;sup>3</sup> "Recommendations for on-the-spot measurements of area", DG-AGRI AI.3 Document Ref. VI/8388/94, Rev. 6 of 17.12.1999. Available at <a href="http://mars.aris.sai.jrc.it/control/">http://mars.aris.sai.jrc.it/control/</a>

At the time of writing, three VHR space sensors are in orbit: IKONOS, EROS A1 and QuickBird 2. Sustainable, rather than occasional, supply of data from any of these sensors is dependent on the existence of supply contracts between the respective image data providers and the Commission. At the end of 2001, this was not yet the case.

GL/G03/M2903C/2001

images. The extra cost of all further processing will be at the expense of the contractor. The rules of copyright both for the Commission and image suppliers will be strictly adhered to.

- 4.1.12 ...
- **4.2** Acquisition of aerial photographs (if relevant to method chosen)

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- 4.3 Processing of images and photographs
- 4.3.1 ...
- 4.3.2 The images will be geometrically corrected using techniques that will ensure a good image-to-map and image-to-image overlay, even with high view angles. This will be achieved by respecting a localisation accuracy as follows, expressed in terms of "absolute root mean square error (RMSE)", i.e. compared to the ground and not to the maps used. The allowed geometric errors in the output images are expressed as a maximum "absolute" Root Mean Square Error (RMSE) tolerance on check points, and are stated below. These values are 1-dimensional RMSE values, and apply independently in the X-, and in the Y- directions:

aerial photographs, VHR satellite imagery: 2.5 m;
SPOT and IRS panchromatic: 20 m;
SPOT multispectral: 30 m;
IRS multispectral and RADARSAT: 40 m;
LANDSAT TM and ERS SAR: 50 m;

The above RMSE tolerances<sup>5</sup> put requirements on the input data, on the ground reference data, on the digital terrain model (DTM<sup>6</sup>) (if applicable) and on each step of the geometric correction process. The tenderer shall detail all steps in the production chain. He shall justify the correction method proposed (e.g. ortho-correction or polynomial) and how he expects to obtain the precision, with special reference to differences in altitude in the agricultural areas concerned. He will also indicate how each subsequent image will be corrected in relation to the first.

- 4.3.3 ...
- 4.3.4 ...
- 4.3.5 ..
- 4.3.6 ...
- 4.3.7 ...
- 4.4 Acquisition of topographic documents

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4.5 Digitisation of the field limits

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4.6 Ground data collection

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Analysis of geometrical quality control results from recent years shows that RMSE values are generally well below the tabled values, and are typically in the order of 1.5 times the image pixel resolution. The listed values should be considered maximum allowed RMSE.

<sup>6</sup> normally, RMSEx = RMSEy and RMSEz = 2 x RMSEx.

## 5. Photo-interpretation of applications

#### 5.1 Preliminary verification

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**5.2** Parcel area check (boundary validation)

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#### 5.3 Land use checks

This checking will at least be started on screen and will be completed, if necessary, by rapid visits on the spot (as far as local regulations allow the contractor to carry out these inspections). Whatever the procedure selected, the contractor has to organise himself to be able to provide a diagnosis for all the parcels within the sites and the sample.

#### 5.3.1 On the screen:

The land use check with **multi-temporal** images **may** be made through **automatic classification** and/or **photo-interpretation** on the screen (Computer-Aided Photo-Interpretation, CAPI). The images will be overlaid with the digitised vectors showing the position of the validated parcels. The tenderer will justify and illustrate his choice and the different stages of the checks. He will describe the training techniques and quality control for both methods. If he uses classification, he will give the criteria for assignment of land use and explain how the classification results are used in the parcel categorisation (e.g. as an ancillary image layer or as automatic parcel label).

- 5.3.2 "Rapid field visits" option
- 5.3.2.1 ...
- 5.3.2.2 ...
- 5.3.2.3 ...
- 5.3.2.4 ...
- 5.3.3 As a minimum, the land use checks will list the "crop groups" below:
  - cereals, distinguishing maize, rice and durum wheat if relevant;
  - oilseed, except linseed;
  - linseed, flax and hemp;
  - grain legumes (if applicable);
  - protein crops;
  - other annual crops;
  - set-aside, differentiated as much as possible from other bare or uncultivated soil;
  - pasture and other forage crops;
  - permanent land use other than grass (orchards, vineyards, woods etc.);
  - non-agricultural use (buildings, lakes, etc.).

Irrigated and non-irrigated crops will be distinguished where the Member States use this differentiation. Furthermore, as many sub-groups should be listed as the number of yield regions with different subsidy levels, in which the parcels are situated.

5.3.4 ...

5.3.5 Parcels benefiting from other area subsidy schemes included in the accompanying measures of the Council Regulation (EC) No. 1257/1999 on rural development (see § 1.2), or in national environment protection schemes, and included in the sample, may also be checked during the control, depending on the choice of the Member State. Examples of such schemes are the compensatory allowances paid for less favoured areas (LFA) and for areas with environmental restrictions, and support measures for agri-

environment and afforestation measures. In all such cases, the role of the control by remote sensing is generally restricted to the measurement of the parcel area and the identification of the land use.

#### 5.4 Synthesis at the application level

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#### 5.5 Two-phase controls

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### 5.6 Reference year control

- 5.6.1 Several reference periods are defined in the regulations, and generally:
  - a parcel which was under "permanent" crop (grassland, orchards, wood, etc.) on 31.12.1991 is not eligible (Article 7(1) of Reg. (EC) No 1251/1999);
  - only parcels which were "cultivated for a crop" during the preceding year may be set aside unless
    they had already been set-aside or withdrawn from the production as part of a Community obligation (Article 18 of Reg. (EC) No 2316/1999).

The set-aside criterion that the parcel was "cultivated for a crop" during the preceding year is no longer applicable (Commission Reg. (EC) No. 556/2001 of 21 March 2001). To check the parcel qualification as a "permanent crop", historic controls are necessary, e.g. to ensure, using archive images, that permanent grassland has not been returned to production and declared as arable. Annex I of Regulation (EC) No 2316/1999, defines what is a "permanent crop". One of the conditions to qualify as such is that the crop has occupied the land for five years or longer. This makes it necessary to go back to the period 1986-1991 if eligibility on 31.12.1991 is examined.

- 5.6.2 ...
- 5.6.3 ...

#### **6.** Decision rules and technical tolerances

#### 6.1 General remarks on decision rules and technical tolerances

- 6.1.1 "Standard" decision rules, based on current European or national regulations, and applicable to crop groups and applications, have already been used in previous years in co-operation with the Administrations. These rules are summarised in the present chapter and will be adapted, where necessary, taking into account the particular situation of each Member State in the year 2002.
- 6.1.2 Since 1997, two alternatives for the application of technical tolerances have been possible, depending on the choice of each Member State: either at the erop group level, or at the parcel level. In the year 2000, the Commission clearly expressed its preference for applying Since 2001, all Member States apply tolerances at the parcel level, which is consistent and compatible with the Commission's recommendations and state-of-the-art for other types of area control measurements.
- 6.1.3 However, the Administration remains fully responsible for its choice and may propose, in its National Addendum, alternative application of technical tolerances, e.g. at the group level.
- 6.1.4 ...
- 6.1.5 ..
- 6.1.6 ..
- 6.1.7 ..

## 6.2 Observations and codification at the parcel level

- 6.2.1 ..
- 6.2.2 ..
- 6.2.2 Codification rules
  - 6.2.3.1 ...
  - 6.2.3.2 ...
  - 6.2.3.3 ...
  - 6.2.3.4 ...

Table 3.

Standard codes related to the condition encountered at the parcel level, and proposed rules for the calculation of retained area and retained land use to be transferred to the group level

Observations at the parcel level	Code	Areas transferred to the group
Land use interpretation impossible	T1	•
Outside images or aerial photographs	<b>T2</b>	
Outside control site (or outside maps available)	T3	Use the area declared
Covered by clouds	<b>T4</b>	and land use declared
Parcel limit problem not resolved on the image	T5	
Declared as less than 0.3 ha (or 0.1 ha)	<b>T6</b>	
Declared as more than or equal to 0.3 ha (or 0.1 ha),	<b>A1</b>	Use measured area and the declared land
but found as less		use
Parcel (or part) claimed more than once	<b>A2</b>	Give zero value to
Parcel or reference not found in the documentation	<b>A3</b>	the disputed part
Area ineligible (reference period, 1986-1991)	<b>A4</b>	of the area
Area ineligible (reference period, set aside)	<del>A5</del>	
Declared in one group, but found in another	C1	Give zero value to the eligible area, except for "obvious errors", or if the eligibility is not affected by an incorrect crop group. If possible, indicate the land use found
Parcel declared in only one group, but found to be in	C2	Divide parcel, then apply
more than one group		previous rules
Land use correct, area outside tolerance (over-	C3+	
declaration)		Use measured area
Land use correct, area outside tolerance (under-	С3-	and
declaration)		observed land use
Obvious error not covered by another code	E1	
Land use correct, area within tolerance	OK	Use declared area and declared land use

6.2.4 ...

#### 6.2.5 Parcel area ceiling based upon the Land Parcel Identification System

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## 6.3 Decision at the crop group level: conformity test

6.3.1 ...

- 6.3.2 As technical tolerances are applied at the parcel level, the declared area was retained for all the parcels within tolerances, and the measured area where the parcels were outside the tolerances. The following three cases will be encountered at the group level:
  - G1: The declared area is equal to the measured area (Dg Mg = 0).
  - G2: The declared area is less than the measured area (Dg Mg < 0). In this case, the Administration will accept and pay only what was claimed.
  - G3-G5: The declared area is greater than the measured area (Dg Mg > 0). In this case, the Administration may consider a readjustment of the payment, the application of penalties or sanctions.

The first two categories can be considered as accepted. The third category should be considered rejected and has to be submitted to a "conformity test", in order to sort the groups to be field inspected.

#### 6.3.3 Sorting of rejected groups (G3-G5)

One of the tests G3 to G5 below will apply for rejected groups, to categorise the severity of the rejection. Groups failing the test require field inspection (all of GR3, GR4 and GR5). For the rejected groups that pass the test (GA3, GA4, GA5) the Administration has the choice of either carrying out field inspections or directly informing the farmer that his claim will be reduced with the discrepancy found. In this context, the G3-G5 tests serve as an optimisation step in the reporting process to the Administration.

Table 4. Conformity test to be applied at the group level in case of rejection

Test	Range of the test Conformity test		Codes for the groups	
	according to the area observed	(declared – measured)	Pass	Fail
G3	$0 < Mg \le S2/P4$	$0 < (Dg - Mg) \le S2 \text{ (ha)}$	GA3	GR3
G4	$S2/P4 < Mg \le S3/P4$	$0 < ((Dg - Mg)/Mg) \le P4 (\%)$	GA4	GR4
G5	S3/P4 < Mg	$0 < (Dg - Mg) \le S3 \text{ (ha)}$	GA5	GR5

In this table: Dg - declared area of the group; Mg - total area assigned to the group after the control, calculated following the rules in Table 3.

- 6.3.3.1 Technical tolerances in percentage (P4) and absolute values in hectares (S2, S3) should be fixed by the National Administrations according to the local conditions. Table 5 below indicates the proposed threshold values.
- 6.3.3.2 Parameters S2 and P4 have to be optimised in order to avoid organising on-the-spot checks for small differences. Some Member States may decide to apply only one absolute threshold (S3), for instance, based on the calculation of the disputed payment.

Table 5. Proposed categorisation thresholds for the crop group

Categorisation thresholds for the crop group	Code	Proposed thresholds
relative (%)	P4	≤ 2 %
absolute (ha)	S2	≤ 0.5 ha
	<b>S3</b>	≤ 2 ha

- 6.3.3.3 Groups with declared area larger than zero (Dg > 0) but found with zero area (Mg = 0) are rejected.

There are three steps in the categorisation of the dossiers: A conformity test; a completeness test; and a final diagnostic per dossier that combine the two previous ones.

- 6.4.1 Conformity test: A dossier is accepted if all groups are "accepted".
- 6.4.2 Completeness test: A dossier will be categorised as "complete" if the total retained area of the T code parcels in the processed groups is lower than two thresholds in percentage:
  - P2 (for the total surface area of the dossier);
  - and P3 (for each of the more important groups, i.e. the set-aside group and oilseeds).

Table 6. **DOSSIER level tests** 

Input	Test	Dossier conformity test	Dossier codes	
			Pass	Fail
The whole dossier	D1	All groups passed?	DA1	DR1
		Dossier completeness test	Dossie	er codes
Area retained for:			Pass	Fail
			(complete)	(incomplete)
the whole dossier	D2	$\Sigma$ [dossier retained area T codes] / $\Sigma$ Mg $\leq$ P2		DI2
		AND		
the set-aside group	<b>D3</b>	[set-aside retained area T codes] / Mg set-as. ≤P3	DC	DI3
		AND		
the oilseed group	<del>₽4</del>	[oilseeds retained area T codes] / Mg oilseeds ≤ P3		<del>DI4</del>

6.4.3 Parameters: Maximum values of the two thresholds are indicated in Table 7. However, the minimum value of these two thresholds and, possibly, the list of the groups to be considered important should be determined by the National Administrations.

The P2 threshold concerns the whole dossier, while P3 only concerns the set-aside group and oilseed group. Beyond each of these thresholds the dossier is incomplete (codes DI2 and DI3 and DI3 and DI4). In order to be complete, a dossier that includes set-aside must therefore pass the two tests —If Administrations decide not to differentiate the P2 and P3 thresholds, then the single completeness parameter should be fixed at P3. The Administration may add other groups judged important to the set-aside and oilseeds groups.

Table 7. **Parameters to be fixed by the Administration** 

		Proposed maximum		
Code	Relative tolerances (%)	Application with	Application without	
		set-aside	set-aside	
P2	Dossier retained area with T codes	50 %	50 %	
P3	Set-aside and oilseed group retained areas with T	50 %	=	
	codes			

### 6.4.4 Final diagnostic at the dossier level

6.4.4.1 The completeness test implies that the dossiers must be processed differently depending on whether they are complete or incomplete. The final decisions to be taken are proposed in Table 8.

After the introduction of Regulation 1251/1999, the differentiation between "general" and "simplified" schemes is no longer made. The "arable" dossiers can, in some member states, be separated in "large producers" (for whom set-aside is compulsory) and "small producers" (who are under no obligation to set land aside, but who may do so if they wish). See the National Addendum for details.

Table 8. Final diagnostic at the dossier level

Test	Conformity	Completeness	Code	Conclusion	
<b>D5</b>	Pass	Pass (complete)	DA5	dossier accepted by remote sensing	
<b>D6</b>	Pass	Fail (incomplete)	DI6	dossier not controlled with Remote Sens-	
				ing; groups which have caused the dossier	
				to be incomplete are verified on the spot	
<b>D7</b>	Fail	Pass (complete)	<b>DR7</b> dossier "rejected"; as a minimum the		
				groups which have caused the dossier to be	
				rejected are verified on the spot	
<b>D8</b>	Fail	Fail (incomplete)	DR8	dossier "rejected"; as a minimum the	
				groups which have caused the dossier to be	
				rejected are verified on the spot, including	
				the part non photo-interpreted.	

- 6.4.4.2 A dossier categorised as incomplete will be counted and paid to the contractor if it has been processed and photo-interpreted normally. It neither will be counted nor paid if it appeared incomplete before the digitisation and the photo-interpretation.
- 6.4.4.3 A Member State may decide whether or not to earry out field inspections to complete the incomplete dossiers. If not, these dossiers should not be accounted for in the control statistics provided every year by the Member States to the Commission. For the dossiers "accepted by remote sensing", i.e. for which a field inspection was not decided, the Member State should keep the measured areas in their IACS in order to manage by appropriate administrative procedures the parcels outside tolerances as well as the small positive discrepancies at the group level.

## 7. Administrative organisation

**7.1 Field inspections** (by the Administration)

#### ••

#### 7.2 Work calendar

This calendar may differ between and within Member States, from one agricultural region to another. It should be based on the following dates but also adapted to the delivery date for applications as adopted by the Administrations pursuant to Regulation No 3508/92 (see §§ 1.3 and 3.2.2).

Indicative dates of the work calendar are given in Table 9. For the interim report, site data for quality control, the final report and satellite image return (which are all deliverables to JRC) the indicated dates are fixed. In case the contractor is not able to keep one of these dates, a justification, approved by the Administration, explaining the delay and indicating the new delivery date, should reach JRC not later than 10 days before the expiry of the deadline.

Table 9. **Provisional work calendar** 

15.09.2001 - 15.01.2002	selection of control sites
01.03 - 01.04.2002	signature of contract
01.04 - 15.06.2002	receipt of digitised declarations of sample to control
01.05 - 30.06.2002	ground data collection
15.06.2002	interim report deliverable to Administration and JRC
20.06 - 20.08.2002	delivery of interpretation results and control documents
15.08 - 10.09.2002	(possible) delivery of photo-interpretation results for spring sown crops
01.09 - 01.10.2002	transmission to the contractor of the results of the on-the-spot checks
15.9.2002	Delivery of site data for quality control to the JRC
15.10.2002	final report deliverable to Administration and JRC
Before 01.12.2002	Return of all supplied satellite data to JRC

7.3	Meetings 
7.4	Quality control
7.5	Deliverables
	The contractor shall deliver the following documents:
7.5.1	
7.5.1.1	
OR	
7.5.1.2	
7.5.1.3	
7.5.2 .	
7.5.3	To the JRC for the quality control (no later than 15.09.2002): The data listed in Table 10, for one site selected by the Member State.
	Table 10.
7.5.4	To the Commission, no later than the 15.10.2002:  • the original images (as they were delivered to the contractor);  • if requested by the Commission, a copy of the data provided for the quality control.
7.6	Documents to receive
	<b></b>
7.7	Progress reports
7.8	Reports
7.9	Archive
7.10	Penalties applicable to the contractor

## 8. General recommendations

•••

## 9. Technical offer

• • •

## 10. Price proposal

10.1 ...

10.2 ...

10.3 ...

10.4 ..

10.5 ..

10.6 ...

10.6.1 ...

10.6.2 Historical controls of the reference periods (if relevant):

H1 control of the 1986-1991 reference period		
H2 control of the previous year reference (set-aside eligibility)		
<del>113</del>	simultaneous control of both references	

10.6.3 The following parameters will be defined in the National Addendum or appear in the Annex of this document:

NSM1, NSM2,, NSMx	number of sites with methods respectively M1, M2,, Mx
NSH1 <del>, NSH2, NSH3</del>	number of sites with controls H1 <del>, H2 or H3</del>
NDM1, NDM2,, NDMx	number of dossiers respectively in sites with methods M1, M2,, Mx
NDH1 <del>, NDH2, NDH3</del>	number of dossiers with controls H1 <del>, H2 or H3</del>
NDD	number of dossiers to be input (if relevant)

All these parameters will be adjusted if necessary at the completion of the contract, in order to obtain the final price.

10.6.4 The following parameters in principle depend upon the lack of optical images:

NSR	number of sites where radar images will be used
NDR	number of dossiers with radar controls

10.7 The tender shall also include the following unit prices, these may not be changed after the tender submission:

FP	base fixed costs for the project
FR	additional fixed costs for the use of radar images (if relevant)
CSM1, CSM2,, CSMx	fixed costs <b>per site</b> with methods respectively M1, M2,, Mx
CSR	additional fixed costs <b>per site</b> where radar images will be used
CSH1 <del>, CSH2, CSH3</del>	additional fixed costs <b>per site</b> with H1 <del>, H2 or H3</del> controls

2002 Common Technical Specifications

Remote-sensing Control of Arable and Forage Land

CDM1, CDM2,, CDMx	variable costs <b>per dossier</b> in sites respectively M1, M2,, Mx
CDR	additional variable costs <b>per dossier</b> in sites with radar images
CDH1 <del>, CDH2, CDH3</del>	additional variable costs <b>per dossier</b> with controls H1 <del>, H2 or H3</del>
CDD	additional variable costs <b>per dossier</b> to be input

```
10.7.1 ...
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10.7.2 ...

10.7.3 ...

10.8

10.9 The possible **supplements** will be calculated in the following way:

Supplements = FR

- + CSR\*NSR + CDR\*NDR
- + CSH1\*NSH1 + CSH2\*NSH2 + CSH3\*NSH3
- + CDH1\*NDH1 + CDH2\*NDH2 + CDH3\*NDH3
- + CDD\*NDD + options + alternatives.
- 10.10
- 10.11
- 10.12
- 10.13
- 10.14
- 10.15
- 10.16
- 10.17

## ANNEX 1. Volume of Work and Requirements specific to each Member State

1. Approximate number of dossiers and sites, with or without reference period control. Further information will be provided within the "National Addendum".

	Number of year 2002 sites			Number of year 2002 dossiers		
	Reference period		]	Referen	<u> </u>	
Member State	with	Without	TOTAL	with	without	TOTAL
France						
Germany	0	9	9	0	3600	3600
Greece	1	3	4	1400	4900	6300
Portugal (satellite images)	2	10	12	1000	7000	8000
Portugal (aerial photos)	0	4	4	0	7000	7000
United Kingdom	0	9	9	0	3600	3600

#### 2. Complementary Information

#### **France**

- The approximate number of control zones in France in 2002 will be 38. The indicative number of sites and dossiers will be defined in the "National Addendum"

#### Germany

- The five Länder HESSEN, MECKLENBURG-VORPOMMERN, NORDRHEIN-WESTFALEN, SACHSEN and SAARLAND participate in the present ITT and will constitute independent lots.
- The controls will use a methodology combining aerial photography and satellite images (only aerial photography in SAARLAND).
- Further specifications will be described by the BML in a "National Addendum" ("Nationaler Zusatz").

#### Greece

- Digital ortho-photographs will be available for some sites.
- Ortho-rectification will be necessary in all sites.

#### **Portugal**

- The number of dossiers and site indicated may be re-adjusted following the introduction of the "simplified scheme", which is expected to have a consequence on the balance between control methods.
- A "National Addendum" ("Adenda Obrigatória") is available (from INGA) and will stipulate the exact date and place of delivery of the tender proposals.

#### **United Kingdom (England)**

- The number of dossiers per site is likely to be 400 (see § 3.1.2).
- The contractor may be required to digitise the applications (see § 3.3.4).
- Further, more precise, information will be given in a "National Addendum".

# ANNEX 2: TECHNICAL RÉSUMÉ OF THE PROPOSAL

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## ANNEX 3: FINANCIAL RESUME OF THE PROPOSAL

(Parts (A) to (F) unchanged)

## $\label{eq:continuous} \textbf{(G) Price proposal for possible supplements}, \textit{excluding VAT}$

(G.1) Radar images FR CSR CDR
Costs excluding VAT

(G.2) References	CSH1	CSH2	CSH3	CDH1	CDH2	CDH3
Costs excluding VAT						

(G.3) Costs excluding VAT, <b>per dossier</b> (see § 10.10)				
Input of 1 dossier (CDD)	digitisation of the limits of	1 field control document	rapid field visit for 1 dos-	
	1 dossier		sier	

(G.4) Other additional costs	Unit price
to keep the archive beyond 31.12.2002:	
to print <b>one</b> complete colour dossier:	

(G.5) Other possible options or alternatives	Unit or total price (specify)

## (H) Multi-year base proposal, excluding VAT (see § 10.14)

	year 1	year 2	year 3
Base fixed costs			
Fixed costs per site			
Variable costs			
Total without options, constant 2002 prices:			
assumption of annual price change retained (inflation, salaries, etc.), in per cent:		%	%
Total without options, variable prices:			

Date:	
Name and Signature:	

(End of document).