European Commission

Directorate General for Health and Consumers

Evaluation of the Community *acquis* on the marketing of seed and plant propagating material (S&PM)

Assignment 5 of the Framework Contract for evaluation and evaluation related services - Lot 3: Food Chain (awarded through tender n° 2004/S 243-208899)

Final Report

Annexes

Submitted by:

Food Chain Evaluation Consortium (FCEC)

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Project Leader: Arcadia International E.E.I.G.

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Annexes

Annex 1 – Terms of Reference of the evaluation

SANCO FRAMEWORK CONTRACT ON EVALUATION, IMPACT ASSESSMENT AND RELATED SERVICES

Tasks Specifications Document 05/07/2007

1. Title of the assignment

Evaluation of the Community *acquis* on the marketing of seed and plant propagating material (S&PM).

2. Context of the assignment

2.1. Description of the Policy Area to be evaluated:

2.1.1. Historical background:

The policy area under evaluation is the acquis pertaining to the marketing of S&PM in the Community. (see also under 2.4. Instruments of the activity). This acquis dates back partly to the sixties. The relevant Directives find their legal basis in Article 37 of the Treaty establishing the European Community. As such it was an element of the agricultural policy.

The main need felt at the time when the Directives were first adopted was to improve the productivity of agriculture, and It was considered that ensuring that seed lots of high quality (certification) belonging to varieties with a high genetic potential (registration of varieties in official catalogues and testing in view of official listing) were made available to the farming community, could contribute to fulfilling that need. At the same time It was expected that the sector of breeding and producing of seeds and propagating material would benefit from the harmonisation of the legislation at community level leading to more open markets.

2.1.2. Current situation:

- According to data provided by the European Seed Association (ESA), the European seed industry has an annual turnover of approx. 6.5 billion Euros. It is a highly innovative Research and Development (R&D)-based business with an average R&D ratio of around 15% of its turnover. The EU market represents more than 20% of the total worldwide market for commercial seed which is valued at around 30 billion Euros. The EU is the most important plant breeding and seed production region in the world and the largest exporter with an estimated export value of 2.7 million Euros representing more than 60% of the total worldwide export value of 4.4 billion Euros.
  This position allows the EU to speak with a strong voice in international fora, but is at the same time an element of vulnerability. The sector of S&PM of the EU has a keen interest in the proper functioning of a global market with recognised international standards.

- Seed production plays an important role in the economy of a number of rural areas *in* the Community, and as such it contributes to the objectives of rural development.

- Increasing the productivity is no longer the main policy objective to be achieved: concepts such as good farming practice, sustainability and protection of the environment including the protection of genetic diversity are now enshrined in the agricultural policy.

- The seed industry underwent significant changes over the last 20 years. Seed businesses have been consolidating and seed production has become increasingly globalised. With the development of biotechnologies, plant breeding is moving to a high-tech industry involving more and more trans-national companies.

- Most of the new varieties brought to the market are now protected by Intellectual Property Rights.

- At the same time a significant part of seed production, and in particular of traditional seed varieties, is made by Small and Medium-sized Enterprises (SME) who play an important role in the conservation of agricultural biodiversity. it is acknowledged that the production of vegetatively propagated material is almost exclusively in the hand of SME.

- As a general rule, companies, regardless of size, have become more organised and work to quality assurance (formal and informal), producing seed of higher quality. Likewise do the seed growing farmers.

- Consumers in the EU give high priority to quality and safety of agricultural production.

- Traceability of food and feed and of any substance intended to be incorporated into a food or feed is now mandatory at all stages of production. For this reason the traceability of seed lots from which food and feed products are produced is now of paramount importance as a starting point for the general traceability of food products placed on the market.

- Reviewing the existing legal measures/practices with a view to reducing the administrative burden for the inspection services and the seed producers or traders is much desired by many Member States.

2.1.3. Challenges for the future, as identified by the Steering Group:

- To ensure that interested users have at their disposal S&PM that fulfils the needs in terms of identity and quality,
- to create the legal environment that contributes to maintaining the profitability of the breeding sector as a prerequisite for competitiveness and as a motor for further development, giving rise to new varieties for more diverse uses, including varieties of energy crops and varieties that are better adapted to sustainable farming practices,
- to ensure that farming is profitable and the environment is safe-guarded,
- to conserve and sustainably utilise agricultural biodiversity as a source for future breeding programmes,
- to maintain and further enhance the achievements of the internal market, in particular by ensuring unhindered intra-Community trade,
- to ensure an efficient registration of data to allow traceability in the market,
- to respond to challenges e.g. in terms of intellectual property and/or environment protection, created by the development of new breeding and reproduction techniques, such as genetically modified (GM) varieties and the related issues of adventitious presence of GM seed in non-GM seed and the links with co-existence.
- to ensure the sustainability of inspection structures/quality schemes, inter alia through exploring ways of passing on the cost of official inspections to the sector (in some countries this is already the common practise), either through making the involvement of the competent authorities payable, or through laying the responsibilities for inspection (at least partially) in the hands of the operators in the sector,
- to keep the legislation abreast of new developments, including the influence of new technologies in breeding and the effects of intellectual property rights associated with these new technologies,
- to elaborate and maintain a cost-effective monitoring system that safeguards quality, breeding effort and profitability, while minimising legal requirements and administrative burden.

2.2. Specific and operational objectives of the activity/action.

2.2.1. The operational objective of the acquis under consideration is the free movement of high quality S&PM of good varieties that meets the expectations of its users.

2.2.2. The main specific objectives are the following:

- To set up the legal framework to ensure that the varieties of S&PM offered on the market are distinct, uniform and stable (DUS criteria) and that at least where applicable they have a sufficient value for cultivation and use (VCU criteria).
- To set up the legal framework to ensure that lots of S&PM on the market are of the correct identity and meet standards in terms of health and analytical purity.

2.2.3. The Community Plant Variety Rights (CPVR) system is of a later date (1994). Its objective is to protect the intellectual property rights of the breeders and it should thus stimulate research and the development of new varieties that satisfy existing and upcoming needs. This system has strong links with the marketing Directives for seed and propagating material, but does not directly fail within the scope of the evaluation.

2.3. Legal basis, budget and duration of the activity/action:

The acquis is based on Article 37 of the Treaty establishing the European Community, and as such it makes part of Title II: Agriculture.
Commission staff working on the acquis: 2ADgrades, *2.5* AST grades.
Community comparative trials are being organised, using budget line 17.04.04.
The amounts spent per year are limited and do not normally exceed 600 000 € per year.
The policy area is not subject to limitations in time.

2.4. Instruments of the activity/action:

The acquis consists of 12 basic Council Directives, part of them being consolidations of earlier Directives.

Council Directive 66/401/EEC on the marketing of fodder plant seed
Council Directive 66/402/EEC on the marketing of cereal seed
Council Directive 2002/54/EC on the marketing of beet seed
Council Directive 2002/55/EC on the marketing of vegetable seed
Council Directive 2002/56/EC on the marketing of seed potatoes
Council Directive 2002/57/EC on the marketing of seed of oil and fibre plants
Council Directive 68/193/EEC on the marketing of material for the vegetative propagation of the vine
Council Directive 92/33/EEC on the marketing of vegetable propagating and planting material, other than seed
Council Directive 92/34/EEC on the marketing of fruit plant propagating material and fruit plants intended for fruit production *[NB:* ***A Commission proposal for a recast of this Directive is currently being discussed at Council level and will need consideration in the evaluation exercise.]***
Council Directive 98/56 on the marketing of propagating material of ornamental plants
Council Directive 1999/105/EC on the marketing of forest reproductive material
Council Directive *2002/53/EC* on the common catalogue of varieties of agricultural plant species

This acquis is complemented by a number of (implementing) Commission Directives, and completed by a united number of Regulations and Decisions (Council and Commission). The latter often have an explicit or a de-facto expiry date.

NB: It should be stressed that four implementing Directives are currently being prepared by the Commission services, one of which has been submitted to the opinion of the Standing Committee on Seeds, where it received the unanimous support of the Member States. It has not yet been adopted by the Commission. All four draft Directives aim to create a legal framework for the marketing of so-called conservation varieties.

Regardless of whether or not these Directives will have been adopted by the time when the evaluation is effectively carried **Out,** the discussion of the impact of the acquis pertaining to the marketing of S&PM on agricultural biodiversity is extremely important and the opinion of various stakeholder groups thereon should be collected and be taken into account in the general context of the evaluation.

Clear links exist with the acquis pertaining to the Community Plant Variety Rights system, plant health, plant protection products, and genetically modified organisms and in particular the following Directives/Regulations:

Regulation (EC) No 2 100/94
Directive 2000/29/EC
Directive 69/464/EEC
Directive 2007/33/EC
Directive 93/85/EEC
Directive 98/57/EC
Directive 91/414/EEC
Regulation (EC) No 1829/2003
Regulation (EC) No 1830/2003
Directive 98/95/EC
Directive 2001/18/EC

A comprehensive list of relevant legal acts is found in Annex.

3. Description of the assignment

3.1. Purpose and objective of the evaluation

In the general context of Better Regulation, the results of the evaluation will be used as input for drafting an Impact Assessment with the view to possibly review the S&PM acquis (see "3.2. Evaluation issues to be addressed').

3.2. Evaluation issues to be addressed

3.2.1. The S&PM acquis and its implementation in the Community will be evaluated, so as to establish objectively how effectively and efficiently the legislation has met *its* original objectives, and to identify its strengths and areas for improvement and its robustness with regard to potential new challenges affecting this field. It will analyse the coherence of the intervention with other related interventions, and with the OECD and other international standards. It will also assess the relevance and the utility of the intervention.

3.2.2. The evaluation is placed in the general context of the Better Regulation initiative of the Community and therefore its primary aim *is,* in close cooperation with the steering group:

- to identify the current problems and needs,
- to suggest possible objectives that the Community should pursue in order to respond to the identified problems and current and expected future needs,
- to identify different realistic options to achieve the proposed objectives, and
- to analyse the social, environmental and economic impacts of each of those options, as well as their feasibility, stakeholders' level of support and their strengths and weaknesses.

The concepts of simplification and reduction of administrative burden on the public authorities and the private sector stakeholders should be behind the analysis of the relevant options.

3.3. Scope of the evaluation (operational, temporal, geographical...)

3.3.1. The evaluation addresses the acquis on the marketing of S&PM *(operational)*, as transposed and implemented by the MS since the origin of the various Community texts *(temporal)*. It should be measured through the effective improvement of the varieties *(of* plant' species covered by the acquis) offered on the EU market *(geographical),* and the level to which the seed lots offered for sale on the market meet the standards laid out in the annexes to the directives.

3.3.2. When compared to the marketing of conventional or GM varieties, the marketing of the conservation varieties is clearly different in socio- economic and genetic diversity terms. The evaluation should address the specific needs of these threatened varieties and species of seeds with a high genetic value that need appropriate *In situ and ex situ* conservation actions. Equally, the evaluation should look into the impact of the cultivation of GM seed crops.

3.3.3. The legislation on the marketing of S&PM primarily aims *to* ensure that S&PM offered to farmers and other users in the EU are of a good inherent genetic quality and meet sufficient quality standards, basically through imposing a set of legal obligations onto breeders and suppliers of S&PM. It is expected, however, that as a positive side *effect*, the harmonisation of marketing standards at community level should also benefit the breeders and producers of S&PM. This aspect should equally be examined by the evaluators.

3.3.4. Lastly, besides the measurement of the impact that the S&PM acquis has had on users and producers of these products in the Community, the evaluation should have a forward looking component *(temporal)*, in that it will have to examine options to ensure that the acquis supports a harmonious further development of agriculture, horticulture and forestry, and its supply sector, and make recommendations accordingly.

NB: In 12 out of 27 Member States, the acquis is just recently introduced. Especially in those Member States there should be scope for assessing the impact (already measurable and anticipated) of the acquis on the various stakeholders.

3.4. Evaluation questions

LESSONS FROM THE PAST:

EQ1. To what extent do the effects induced by the intervention correspond with its objectives as outlined in the S&PM acquis and the needs it is aimed to satisfy?

The evaluators shall analyse all the effects of the acquis, intended and unintended, positive and negative. In the cases where the above objectives have not been attained (or have been attained only partially) or where the needs have not been satisfied, the evaluators are requested to specify the reasons (flaws in the system, poor implementation, other...) and provide examples of problems encountered.

The detailed questions hereunder are offered as an example and are essentially based on the legal provisions of the Directives on the marketing of seed of agricultural plant species, as these Directives offer the broadest range of legal measures. The evaluators are expected to develop and implement a methodology that ensures that all the subsectors of the sector of S&PM are sufficiently well covered by the evaluation and that dear conclusions can be drawn with regard to the effectiveness and the utility of the current provisions of the acquis on the marketing of S&PM.

A. GENERAL ACQUIS FRAMEWORK

a) To what extent has the acquis on the marketing of S&PM created the framework for the production and marketing of S&PM of sufficient quality in a sufficiently wide range of varieties to cover the needs of farmers, horticulturalists, nurserymen and foresters in the EU?

b) To what extent bas the EU acquis, and in particular the concept of certification, facilitated the free marketing of S&PM in the EU?

c) To what extent can S&PM effectively be traded throughout the EU without impediments created by official or semi-official bodies? Are there examples where the free marketing throughout the Community of S&PM that complies with the provisions is not guaranteed? Is the hindrance based on measures directly derived from the acquis on the marketing of S&PM or on other legislation (such as plant health, plant protection products, GMO-legislation,..)?

d) To what extent has it created the framework within which the trade of S&PM produced in the EU is competitive on the EU and the world markets?

e) To what extent has it contributed to a harmonious development of the S&PM sector in the EU, granting the protection of the income of fanners, seed producers and plant breeders?

f) To what extent do seed lots imported under the equivalence regime offer the same (or worse, or better) guarantees as the S&PM produced in the EU?

g) To what extent does the acquis contribute to the preservation and/or erosion of plant genetic resources in the EU? Where the acquis was considered to have a negative impact, have national measures been put in place to contribute to the protection of plant genetic resources?

h) To what extent did the Community Plant Variety Regime play a role in creating the necessary room and incentives for a continued research into new varieties resulting in a constant influx of valuable new varieties into the market?

i) To what extent is it considered that the attribution of Plant Variety Rights (at national of Community level) is not only beneficial for the right holders, but for the users of the S&PM as well?

j) How do you assess the impact of the SPS (Sanitary and PhytoSanitary) and TBT (Technical Barriers to Trade) agreements on the trade in S&PM in the Community?

B. VARIETY DENOMINATION PROCEDURES:

To what extent does the system put in place for variety denomination in the Community fulfil the needs it aims to satisfy?

C. VARIETY REGISTRATION/LISTING PROCEDURES:

To what extent do the variety registration / listing procedures fulfil the needs they aim to satisfy?

D. COMMON CATALOGUES (CC):

a) To what extent are the CC a useful instrument for the management of the S&PM acquis?
b) To what extent does the existence of national and common catalogues create impediments to free movement of S&PM in the EU?
c) To what extent does the lapse of time between national registration and publication in the CC lead to practical problems?
d) How are the catalogues currently being used?
e) What is the Level at which the CC (either in hard copy or in e-version) are made available to staff (all staff, headquarters only…)?

E. CERTIFICATION:

a) To what extent are the provisions with regard to certification under official supervision implemented by the MS?
b) To what extent do MS believe that Community comparative trials are an effective and efficient tool to
   1) assess the compliance of (randomly) selected seed lots with the community provisions,
   2) study the effectiveness of the Community provisions in guaranteeing that the Community standards are met,
   3) act as a discussion forum for possible new measures that solve weaknesses in the system?
c) To what extent could a private certification scheme replace official ones, and what would be the advantages or disadvantages as compared to official schemes in respect of marketing within the EU and on the world market?

F. COMMUNITY PLANT VARIETY OFFICE (CPVO):

How do you evaluate the current role of the CPVO in the general set-up of the acquis on the marketing of S&PM

EQ2. To what extent are the costs involved in fulfilling the obligations imposed by the acquis reasonable and proportionate?

There are three different types of costs that should be considered:

(1) administrative costs i.e. those costs incurred by companies and public authorities in meeting legal obligations to provide information on their action or production to public authorities or private parties,
(2) compliance costs i.e. those costs linked to changes in the method of production linked to legal obligations and
(3) enforcement costs i.e. costs for public authorities and the Commission resulting from implementation.

A specific focus should be put on administrative costs. The evaluators are required to provide a precise quantitative analysis of administrative costs under the current system, using the Standard Cost Model attached (Administrative cost of obligations under EU legislation -see Report sheet) as far as possible and providing at least an average of the costs for both public authorities and companies. It may include a number of assumptions or/and extrapolations but shall be based on discussions with stakeholder representative organisations and public authorities.

A. Costs incurred by public authorities:

a) What is the number of applications / certification dossiers inspections etc. each year in each MS? And the average for the entire EU?

b) What is the structure of the costs and what are the associated cost elements for:

- Transposition of the acquis
- DUS (Distinctness, Uniformity and Stability) and VCU (Value for Cultivation and Use) testing for listing at National and community levels;
- DUS for Plant Variety Rights;
- Comparison with DUS for listings and Plant variety rights for the same species, varieties;
- Registration of varieties, including variety denominations
- Certification (per Directive and per category)
- Managing the national system for variety protection
- Inspection? Audits?
- Information related costs?
- Submission of reports to the Commission?

c) What opportunities do public authorities see to reduce the administrative costs? Per category, per type of activities etc.

B. Costs incurred by the operators (To be requested of stakeholder representative organisations only):

a) To what extent are the administrative costs of the implementation of the S&PM acquis transferred to the sector?

b) What is the number of applications dossiers / certification each year by companies?

c) What is the structure of the costs in particular:

- Own costs of the companies for filling application (e.g. training for familiarisation with application procedure, costs for gathering relevant info needed for application, costs for providing new data including testing, costs of filling in the application, costs for meetings internally or with auditors or with lawyers, costs for copying dossiers, submitting the information, cost to protect a variety under the Community Plant Variety Right system, etc.)
- Payments made to official bodies for application for authorisation

d) What opportunities do operators see to reduce the administrative costs? In which areas?

e) What is the level of satisfaction with the current repartition of the costs of operating the registration (including variety denomination) and certification provisions of the acquis?

C. On the option of certification under official supervision or other means of sharing tasks and responsibilities:

a) To what extent is it possible to *assess* the opportunities for cost-reduction?

b) What is the reason why certain MS do not avail of this possibility?

c) Are they implementing other means of cost reduction?

d) What other possibilities do the MS (and operators) see to reduce the administrative burden and to simplify and speed up procedures?

EQ3. To what extent are the elements of the current intervention logic (the composing features of the S&PM acquis) complementary and non-contradictory? To what extent do the intervention's objectives support or contradict those of other related interventions?

Regarding the second question:

a) To what extent do the intervention's objectives support or contradict those of other related interventions within DO SANCO's ambit, such as the acquis pertaining to plant quarantine, to plant protection products, authorisation of GMO's (as far as notified under Regulation (EC) No 1829/2003?,

b) To what extent is the acquis on marketing of S&PM compatible and non contradictory with the EU's policies as managed by relevant other DGs (e.g. common market organisation, environmental policy, trade policy)?

c) How well is the acquis in line with OECD, UN-ECE and other international standards?

EQ4. To what extent is the current S&PM acquis relevant with regards to the identified problem areas and new **challenges?**

a) To what extent can we consider that the acquis still suits the need of the enlarged Community, and that its composing elements are also adapted to the geographical, social, economic and environmental conditions of the new Member States.

b) To what extent does the acquis strike a fair balance with regard to the interests of the various stakeholders groups in the new MS?

c) There is a strong involvement of public services in the implementation of the acquis (e.g. certification bodies issuing the labels themselves) and in the monitoring of the activities of stakeholders. Instead of this involvement other possibilities exist, like passing on the full liability for their products to the economic operators in the S&PM sector (as in the general Food Law Regulation (EC) No 178/2002). What are the consequences with regard to liability issues in relation to the various degrees of sharing tasks between the public bodies and the private sector stakeholders? What is the situation in Member States that avail of the possibilities of the acquis to go for certification under official supervision as compared to MS who don't?

<u>OPTIONS FOR THE FUTURE</u>:

EQ5: What are the different options for the future to address the problem areas identified and the new challenges? What is the relevance and the social, environmental and economical impact of each option proposed?

For EQ5, the evaluators are required to present different options, including the "status qua" option (i.e. keeping the current S&PM acquis as it is) as well as the possibility to suppress the acquis (and leave it at the level of operators and/or Member States) and analyse their relevance.
For each of them, they should analyse the economical, environmental (if possible, including the ability of the markets to adapt to climate change) and social impacts, the stakeholders' level of support, their feasibility, their strengths and weaknesses (advantages and disadvantages), and an analysis of the reductions of administrative burden and associated costs anticipated by the proposed simplification measures. For the different options proposed, a calculation of the variations compared to the baseline

as regards costs (administrative costs in particular) should be sought.

Here too it is stressed that the evaluators should address all the various subsectors of the S&PM covered by the Community acquis.

With regard to possible options for the future, the evaluators will analyse, if relevant, the following:

A. GENERAL ACQUIS FRAME WORK:

The need for the high level of protection of the users of S&PM was inspired by the importance of S&PM as a basic component for ensuring food security. The fact that seed quality is difficult to assess by simple visual inspection of the goods upon delivery and that liability of the supplier is often difficult to prove also played a role. For these reasons certification by a "third party body" was made obligatory.

a) To what extent is this level of protection still needed? Would it be possible to shift to quality assurance systems that are commonly implemented in other sectors?

b) What do you see as potential advantages or threats?

c) To what extent should the number of crops/species covered by the S&PM acquis be reduced/increased? What criteria should be used for determining which species should be removed or added?

d) Under the provisions of the Community plant health acquis, producers of S&PM are subject to registration and (at least) annual inspection of their crops. Already today MS have the option to accept certification labels for seed potatoes as being valid as plant passports. Do you consider that a further integration of the inspection regime for seed certification and for plant health could lead to gains in efficiency or, on the contrary to inefficacy and confusion? What are the possible fields for co-operation in practice.

e) To what extent is it considered that the choice of legal instruments (such as entrusting more responsibilities to the Commission, as assisted by the Standing *Committees*, or using Regulations rather than Directives) could equally contribute to reducing the general *administrative* burden or make the decision-making process faster?

B. VARIETY DENOMINATION PROCEDURES

What should be the advantages and disadvantages of organizing the variety denomination procedures at Community level only (i.e. under a centralized system, e.g. under the umbrella of the Community Plant Variety Office?)

C. VARIETY REGISTRATION/LISTING PROCEDURES

a) To what extent is a system of variety registration for agricultural and vegetable species still needed?

b) What are the advantages and disadvantages of DUS testing being organized at Community level / by national or regional authorities / by the breeders under official supervision?

c) What are the advantages and disadvantages of DUS testing being the same and unique for the marketing Directives system and for the Community Plant Variety Rights system?

d) What are the advantages and disadvantages of VCU testing being kept as a precondition for listing the agricultural varieties? 1f the VCU testing should be kept, what are the advantages and disadvantages of it being organized at Community level / by national or regional authorities / by the breeders under official supervision?

e) What are the advantages and disadvantages of widening/ reducing the number of crops for which VCU testing is required? Indicate the crops for which a change from the current provisions would be desirable.

f) To what extent do the standards have to be adapted to the development of new breeding technologies (in particular GM seeds, Genetic Use Restriction Technologies (GURTs), etc.)?

D. COMMON CATALOGUES

a) What are the advantages and disadvantages of stopping National Listing and only working with CC allowing Member States to have National Listing for species not covered in the directive?

b) To what extent would it be desirable to increase the number of updates?

c) To what extent would it be acceptable to reduce the number of updates published in the OJ, provided that updates are made available on a regular basis in electronic format?

d) What elements of information currently contained in the CC could be dropped? Are there elements that need to be added?

e) Which other means to improve efficiency could be explored? Could a thorough electronic system be part of a solution?

E. CERTIFICATION

a) To what extent is a system of certification still needed? What are the advantages and disadvantages of a system in which it would be up to the producers of S&PM to be responsible for the quality of the material? Is there scope for extending the *activities* carried out under official supervision?

b) To what extent are the quality standards (identity, varietal purity, germination...) and the norms levels still relevant?

c) If a certification system is still needed, to what level should the requirements be fixed (e.g. basic level in the legislation, with extra quality requirements left up to the private companies)?

F. CPVO

a) To what extent should the CPVO get a more active role in the registration of varieties, including variety denomination and DUS, the management of the CC, regardless of applications for protection of variety rights?

b) Are there other tasks that might be entrusted to the CPVO (e.g. comparative trials, equivalence with Third Countries...)?

c) What would be the advantages and disadvantages, and the possible added value, of the Commission delegating all or some activities in the management of the CC to the CPVO? To the MS? To other bodies?

Costs (benefits) of the various options under points A to F shall be considered not only with regard to the current system but also considering a system where all responsibility is left to private business without specific public role.

3.5. Other specific tasks to be carried out under the assignment

The evaluators are required to reconstruct the intervention logic as a preliminary step to the evaluation design, and present it in the Inception Report. They will also present the draft questionnaires that they will use to obtain information from the different stakeholders for approval by the steering group.

3.6. Reporting and deliverables

The evaluators will deliver different reports al various key stages of the evaluation process: inception report, intermediate report, draft final report and final report. Each report should be written in English. The report will be addressed to the Commission who will be assisted by a Steering group consisting of Commission officials and experts from, but not participating on behalf of, Member States:

a) Inception report

This report will describe the intervention, providing the current intervention logic. It will describe the evaluators' understanding of the evaluation objectives, issues and questions. This document will present in detail how the method proposed by the evaluator is going to be implemented and in particular how the method will answer each evaluation question and provide a judgement. It will include the draft questionnaires which the evaluators will use to obtain information from the different stakeholders for approval by the steering group This document will provide the steering group with the opportunity to make a final check of the feasibility of the method proposed and the extent to which it corresponds with the information needs outlined in the terms of reference.

The inception report will be submitted at the latest 6 weeks after the signature of the contract.

b) Interim report

This report will provide information about initial analyses of data collected. The evaluator may already be in a position to provide preliminary answers to some of the evaluation questions. This report will provide the steering group with the opportunity to check whether the evaluation is on schedule and whether the evaluation has actually focused on the specified information needs.

The interim report will be submitted at the latest *5.5* months after the signature of the contract.

c) Draft final report

This document will provide the conclusions of the evaluator in respect to the evaluation questions in the terms of reference. These conclusions will be clearly based on evidence generated through the evaluation. Judgements provided should be dear and explicit. The draft final report will also contain some exploratory recommendations developed on the basis of the conclusions reached by the evaluator. The structure of the draft final report will respect the structure set up by common Evaluation Standards and include an executive summary (synthesis of main analyses and conclusions, added value of the proposals including cost/benefits), main report (presenting in full the results of the analyses, conclusions and recommendations), technical annexes (one of which will be the Task Specification), and a draft one-page summary on the Key Messages of the evaluation.

The draft final report will be submitted at the latest 9 months after the signature of the contract.

d) Final report

It will take into account the results of quality assessment and discussions with the steering group about the draft final report insofar as they do not interfere with the autonomy of the evaluators in respect to their conclusions. The final executive summary and Key Messages page will be part of it.

3.7. Organisation and timetable

Date	Event/Stage	Action by
19-03-2007	Internal kick-off	SANCO El and 01
End March	Invitation letters to Steering Group (SIG) members	Evaluation manager (EM)
Mid April	Deadline reply to invitation letter	
End April	First draft of terms of reference (ToR) circulated	Evaluation manager
16 May	1st mtg of StG: Presentation of the evaluation: its aim and scope; discussion of Draft terms of reference and Dissemination Plan	StG members
25 June	Revised ToR circulated	Evaluation manager
26 June	2nd mtg of StG: continued discussion of Draft terms of reference	StG members
2 July	Proposal for ToR finalised by MS	Evaluation manager
5 July	ToR of the evaluation discussed in the Audit Committee ToR sent to Evaluator	Evaluation manager
10 August	Evaluator submits proposal	Evaluator
13 August	Proposal circulated to StG for comments	Evaluation manager
August/September	Proposal analysed and amended as necessary	
Mid September	Draft specific contract prepared	MS + Financial ceil
End September	Details of contract with the external evaluator discussed and contract signed	
Mid October	Relevant Council WP and SC updated on progress with the evaluation	MS
End October	3th mtg of StG: Kick-off mtg, External evaluator present	StG members
Mid November	Inception report submitted by Evaluator and circulated to for comments	
Mid December	Inception report accepted by Commission	StG members
Mid March 2008	Interim Report circulated to StG members	External evaluator
End March 2008	4th mtg of StG: Discussion of Interim report	StG members+ External evaluators
Mid April 2008	Relevant Council WP and SC updated on progress with the evaluation	EM

End June 2008	Draft Final Report circulated to StG members	External evaluator
+/- 20 July 2008	5th meeting of StG: discussion of draft final report	StO members + External evaluators
End October 2008	Adoption of the final evaluation report	StG members
End November 2008	Presentation of results of the evaluation	
April 2009	Completion of the Action Plan	
May 2009	Adoption of the Action Plan	Audit Committee

3.8. Budget

Budget line: 17 01.04.01. Foreseen maximum amount: 300,000 €

3.9. Special requirements

- Given the very specialised nature of the subject matter that has to be evaluated, the evaluation team is expected to comprise at least one member with specific expertise in the sector of seeds and propagating material, or, as a minimum, with a thorough knowledge of plant production.

- In the context of the assignment, data will have to be collected of a confidential nature, such as expenditure made by stakeholders as part of the administrative costs for complying with certain provisions of the EU legislation. These data shall be handled with due confidentiality

4. References

4.1. Annexes to the Task Specification

- List of Phytosanitary acquis in force

- List of MS representatives in Standing Committee on Seeds

- List of MS representatives in Standing Committee on Plant Health

- List of MS representatives in Standing Committee on Community Plant Variety Rights

- List of stakeholders (not exhaustive)

4.2. Other existing documentation/data and how to access it

4.3. Useful web-links

- SANCO Seeds and Propagating Material website

- Recommended methodology for the calculation of "Administrative cost of obligations under EU legislation"

Annex 2 – Qualitative questionnaire

Evaluation of the Community '*acquis*' on the marketing of seed and plant propagating material (S&PM)

Qualitative questionnaire

SURVEY by the FCEC (Food Chain Evaluation Consortium)

Introduction

This survey takes place in the framework of the evaluation of the Community '*acquis*' [1] on the marketing of seed and plant propagating material(S&PM). The objective is to collect your view on the past implementation of the EU S&PM '*acquis*' and on alternatives for the future. For more information on the Community S&PM '*acquis*', please refer to the DG SANCO website http://ec.europa.eu/food/plant/propagation/index_en.htm

This survey makes part of a complete data collection process that also includes analysis of literature, interviews and case studies.

The following questionnaire covers the different activities linked to the marketing of S&PM. In addition to the identification data, it contains 77 questions grouped into 4 sections. Those questions are general ones, as they have been developed with the objective of targeting a large range of organisations in the S&PM sectors.

This questionnaire does not cover the issue of **Community Plant Variety Rights (PVR) (COUNCIL REGULATION (EC) NO 2100/94)** which is not within the scope of the evaluation. However, the links that exist between the '*acquis*' and the Plant Variety Rights will be taken into account.

The questionnaire should be completed in English. The confidentiality of your responses and statements is guaranteed in the sense that your organisation will be mentioned as having responded to the survey but that none of the comments and remarks included in the evaluation report will be identifiable.

The information you provide through this questionnaire will be crucial in identifying the current problems, if any, and in making proposals for a possible revision of the EU S&PM '*acquis*'. We therefore greatly appreciate your contribution.

If you have any further questions, do not hesitate to contact:
Laurence Van Nieuwenhuyse:
Phone: +32 2 641 00 97 fax: +32 2 641 00 30 email: lvn@bvdmc.com

Please return this questionnaire by e-mail to Laurence Van Nieuwenhuyse (lvn@bvdmc.com) within 8 weeks, so before the 11th April 2008.

[1] The '*acquis*' consists of 12 basic Council Directives on the marketing of S&PM. This '*acquis*' is being complemented by a number of (implementing) Commission Directives, and completed by a limited number of Regulations and Decisions (Council and Commission).

Instructions for filling in the questionnaire

The **analysis of the responses** to this questionnaire will distinguish between three groups of crops as follows:

The group 'Seed': this group gathers the crops/species regulated under the Council Directives 66/401/EEC (fodder plant seed), 66/402/EEC (cereal seed), 2002/54/EC (beet seed), 2002/55/EC (vegetable seed), 2002/56/EC (seed potatoes), 2002/57/EC (seed of oil and fibre plants), 2002/53/EC (common catalogue of varieties of agricultural plant species);
The group 'Propagating material': this group gathers the crops/species regulated under the Council Directives 68/193/EEC (material for vegetative propagation of the vine), 92/33/EEC (vegetable propagating and planting material other than seed), 92/34/EEC (fruit plant propagating material and fruit plants intended for fruit production), 98/56/EC (ornamental plants)[2];
The group 'Forestry material', which refers to the Council Directive 1999/105/EC on the marketing of forest reproductive material.

One questionnaire may concern one group of crops only. If you would like to answer for several groups, **please use as many questionnaires as required**.

The questionnaire is divided into sections and sub-sections as follows:

Section 0: identification data	Sections 0 and 1 are **compulsory**
Section 1: Overall Community '*acquis*'	
Section 2: Variety/material registration 2.1. DUS[3] testing 2.2. VCU[4] testing 2.3. Variety denomination 2.4. Common catalogues	Sections 2, 3 and 4 are not relevant to all organisations. **Please consider the section(s) relevant to your organisation only**.
Section 3: Certification	
Section 4: Role of the CPVO[5]	

Each section and sub-section distinguishes between the lessons from the past and the suggestions for the future. Sections 2 and 3 also contain an area for conclusions.

[2]Ornamental can be either plant or seed. Both are included in this group.
[3] DUS: Distinctness, Uniformity, Stability
[4] VCU: Value for Cultivation and Use
[5] CPVO: Community Plant Variety Office

SECTION 0. IDENTIFICATION DATA

Please identify your organisation:

Name of organisation	
Department within the organisation	
Organisation located in (country)	

Type of organisation:(*several answers possible*)

Policy making authority	☐
Variety registration authority	☐
Certification authority	☐
Professional associations of USERS of S&PM (including organic farming)	☐
Professional associations of SUPPLIERS of S&PM (breeders and multipliers)	☐
Other stakeholders: *Please specify:*	☐

Questionnaire completed by:

Name of the person filling in the questionnaire	
Position within the organisation	
Phone number	
Email address	

For which group of crops are you answering this questionnaire? *(Only one answer possible)*

Seed	☐
Propagating material	☐
Forestry material	☐

In addition to sections 0 and 1, for which section(s) are you answering the questionnaire? *(Several answers possible)*

Section 2: Variety/Material registration	☐
Section 3: Certification	☐
Section 4: Role of the CPVO	☐

SECTION 1. OVERALL COMMUNITY *'ACQUIS'*

1.1. LESSONS FROM THE PAST

1.1.1. Has the EU S&PM 'acquis' been effective in ensuring the marketing of new varieties with better characteristics? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

1.1.2. Has the EU S&PM 'acquis' been effective in ensuring the marketing of S&PM of sufficient quality? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

1.1.3. Has the EU S&PM 'acquis' been effective in facilitating the free marketing of the S&PM in the EU? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

1.1.4. Have the following elements had a positive, negative or no impact on the free marketing of S&PM? *(Only one answer possible per line of the table)*

	Positive impact	Negative impact	No impact	Don't know	Not applicable
Lack of harmonisation between national provisions	☐	☐	☐	☐	☐
Impediments created by national official or semi-official bodies	☐	☐	☐	☐	☐
Existence of national and common catalogues	☐	☐	☐	☐	☐
Community '*acquis*' on plant health (DG SANCO)	☐	☐	☐	☐	☐
Community '*acquis*' on plant protection products (i.e. seed treatments) (DG SANCO)	☐	☐	☐	☐	☐
Authorisation for cultivation of GMO's	☐	☐	☐	☐	☐
Environmental policy (e.g. DG ENV)	☐	☐	☐	☐	☐
Trade policy (e.g. DG TRADE, SPS agreement, TBT agreement[6])	☐	☐	☐	☐	☐
Other: *Please specify :*	☐	☐	☐	☐	☐

Please illustrate with example(s) if the free marketing has been negatively impacted:

[6] SPS = Sanitary and PhytoSanitary, TBT = Technical Barrier to Trade

1.1.5. Has the EU S&PM 'acquis' had a positive, negative or no impact on the following elements?
(Only one answer possible per line of the table)

	Positive impact	Negative impact	No impact	Don't know	Not applicable
The competitiveness of S&PM within the EU	☐	☐	☐	☐	☐
The competitiveness on the world markets of S&PM produced in the EU	☐	☐	☐	☐	☐
The income of plant breeders	☐	☐	☐	☐	☐
The income of S&PM producers	☐	☐	☐	☐	☐
The income of farmers	☐	☐	☐	☐	☐
The preservation of plant genetic resources in the EU	☐	☐	☐	☐	☐
The funding of plant breeding improvement efforts	☐	☐	☐	☐	☐
The control of plant diseases	☐	☐	☐	☐	☐

Please comment on your answer, by referring to the concerned provisions of the S&PM 'acquis':

1.1.6. How do you assess the provisions of the S&PM 'acquis' regarding the following elements?
(Only one answer possible per line of the table)

	Not at all	Not much	Partly	Fully	Don't know	Not applicable
Easy to understand	☐	☐	☐	☐	☐	☐
Easy to implement	☐	☐	☐	☐	☐	☐
Usefulness	☐	☐	☐	☐	☐	☐
Consistency between the provisions of the different EU S&PM Directives	☐	☐	☐	☐	☐	☐
Consistency between the provisions of the EU S&PM '*acquis*' and those of other regulations at EU and/or international level (eg plant health legislation)	☐	☐	☐	☐	☐	☐

Please comment on your answer:

1.1.7. How do you rate the value of the following directives? *(Only one answer possible per line of the table)*

	No value	Little value	Valuable	Very valuable	Don't know	Not applicable
66/401/EEC (fodder plant seed)	☐	☐	☐	☐	☐	☐
66/402/EEC (cereal seed)	☐	☐	☐	☐	☐	☐
2002/54/EC (beet seed)	☐	☐	☐	☐	☐	☐
2002/55/EC (vegetable seed)	☐	☐	☐	☐	☐	☐
2002/56/EC (seed potatoes)	☐	☐	☐	☐	☐	☐
2002/57/EC (seed of oil and fibre plants)	☐	☐	☐	☐	☐	☐
68/193/EEC (material for vegetative propagation of the vine)	☐	☐	☐	☐	☐	☐
92/33/EEC (vegetable propagating and planting material other than seed)	☐	☐	☐	☐	☐	☐
92/34/EEC (fruit plant propagating material and fruit plants intended for fruit production)	☐	☐	☐	☐	☐	☐
98/56/EC (ornamental plants)	☐	☐	☐	☐	☐	☐
1999/105/EC (forest reproductive material)	☐	☐	☐	☐	☐	☐
2002/53/EC (common catalogue of varieties of agricultural plant species)	☐	☐	☐	☐	☐	☐

Please comment:

1.1.8. To what extent do S&PM lots imported under the equivalence regime offer the same (or worse, or better) guarantee as the S&PM produced in the EU? *(Only one answer possible)*

☐ Same guarantee ☐ Worse guarantee ☐ Better guarantee ☐ Don't know ☐ Not applicable

Please comment on your answer:

1.1.9. Are rules on variety maintenance necessary? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

1.1.10. Are rules on variety maintenance cost-effective? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

1.2. SUGGESTIONS FOR THE FUTURE

1.2.1. The main need felt at the time when the S&PM 'acquis' was first adopted was to improve the productivity of agriculture. Today, what would be the main aims when revising the Community S&PM legislation ('acquis')? *Please rank starting from 1 for the most important aim.*

Aims	Ranking (from 1 for the most important aim)	Don't know	Not applicable
Productivity		☐	☐
Suitability of varieties for low-input agriculture		☐	☐
Protection of the environment		☐	☐
Food safety		☐	☐
Plant health		☐	☐
Sufficient quality of S&PM (identity, purity…)		☐	☐
Farm-saved S&PM		☐	☐
Development of new plant breeding technologies (GM, molecular breeding, etc...)		☐	☐
Diversity of the varieties		☐	☐
Information to users (traceability of S&PM lots)		☐	☐
Other: *Please specify :*		☐	☐

Please comment on your answer, by specifying the expected positive/negative effects of considering any new aim:

1.2.2. How should the S&PM 'acquis' be structured in the future? *(Only one answer possible per line of the table)*

Suggestions	In favour	Not in favour	Don't know	Not applicable
Maintain Directives, as they currently stand	☐	☐	☐	☐
Compile Directives per group of crops (*e.g. one Directive for the seeds)*	☐	☐	☐	☐
Compile Directives according to the final use of the certified seeds/material and their products (*e.g. use in food or non food sectors*)	☐	☐	☐	☐
Compile Directives per type of users (*e.g. professional users or non professional users*)	☐	☐	☐	☐
Other: *Please specify :*	☐	☐	☐	☐

1.2.3. What should be the legal instruments to regulate the marketing of S&PM at EU level in the future? *(Only one answer possible per line of the table)*

Note:
A Regulation shall have general application. It shall be binding in its entirety and is directly applicable in all Member States.

A Directive shall be binding, as to the result to be achieved, upon each Member State to which is is addressed, but shall leave to the national authorites the choice of form and methods. It has to be transposed into their national legal framework.

Suggestions	In favour	Not in favour	Don't know	Not applicable
Community Directives for variety/material registration	☐	☐	☐	☐
Community Directives for certification	☐	☐	☐	☐
Community Regulations for variety/material registration	☐	☐	☐	☐
Community Regulations for certification	☐	☐	☐	☐
Other: *Please specify :*	☐	☐	☐	☐

1.2.4. What are the advantages of the suggestions you support (replies "in favour" under 1.2.2. and 1.2.3.) and their expected positive effects?

Please specify for each suggestion you support:

1.2.5. What are the disadvantages of the suggestions you do not support (replies "not in favour" under 1.2.2. and 1.2.3.) and their expected negative effects?

Please specify for each suggestion you do not support:

SECTION 2. VARIETY/MATERIAL REGISTRATION

2.1. DUS TESTING

2.1.1. LESSONS FROM THE PAST

2.1.1.1. Have the Community provisions for DUS testing been effective in ensuring that no new variety has been marketed unless it is distinct, uniform and stable? *(Only one answer possible per line of the table)*

	Not at all effective	Not much effective	Partly effective	Fully effective	Don't know	Not applicable
Community provisions for:						
Distinctness	☐	☐	☐	☐	☐	☐
Uniformity	☐	☐	☐	☐	☐	☐
Stability	☐	☐	☐	☐	☐	☐

If your answer is 'not at all', 'not much' or 'partly', please comment on it, by specifying the problem:

2.1.1.2. Have some DUS requirements limited the marketing of varieties of interest to users? *(Only one answer possible)*

☐ Yes ☐ No ☐ Don't know ☐ Not applicable

If your answer is 'yes', please specify which requirements:

2.1.1.3. To what extent are the costs involved in fulfilling the obligations imposed by the Community provisions for DUS testing reasonable and proportionate? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

2.1.1.4. To what extent has the public authority transferred the cost of operating the DUS testing to the industry? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer, by specifying the percentage of cost transfer, if any:

2.1.1.5. To what extent is the current distribution (between industry and public authorities) of the costs of operating the DUS testing appropriate? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

2.1.2. SUGGESTIONS FOR THE FUTURE

2.1.2.1. What should be done in the future regarding the Community DUS acceptance criteria, <u>without considering the protection aspects</u>? *(Only one answer possible per line of the table)*

	Maintain	Extend	Reduce	Remove	Don't know	Not applicable
Acceptance criteria for:						
Distinctness	☐	☐	☐	☐	☐	☐
Uniformity	☐	☐	☐	☐	☐	☐
Stability	☐	☐	☐	☐	☐	☐

Please comment on your answer:

2.1.2.2. What should be done in the future regarding the operational organisation of DUS testing? *(Only one answer possible per line of the table)*

Suggestions	In favour	Not in favour	Don't know	Not applicable
Maintain the current organisation of DUS testing	☐	☐	☐	☐
Organise and coordinate DUS testing at Community level instead of by national or regional authorities	☐	☐	☐	☐
Organise DUS testing at breeders level, under official supervision	☐	☐	☐	☐
Extend the bilateral agreements in order to rationalize the number of DUS testing sites in the EU	☐	☐	☐	☐
Have a same and unique DUS testing for marketing and for the Community Plant Variety Rights system	☐	☐	☐	☐
Adapt the standards to the development of new breeding technologies	☐	☐	☐	☐
Other: *Please specify*	☐	☐	☐	☐

2.1.2.3. If you are in favour of adapting the standards to the development of new breeding technologies, please specify which ones.

Please specify:

2.1.2.4. For each suggestion you support (replies "in favour" under 2.1.2.2), please estimate the expected effects on cost and staff and specify the parties concerned (Commission, the national registration authorities and/or the private operators).

Supported suggestions	% of reduction of costs	% of reduction of staff	Parties concerned		
			Commission	National authorities	Private operators
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

2.1.2.5. What are the advantages of the suggestions you support (replies "in favour" under 2.1.2.2) and their expected positive effects (for example : on the user, the organisation of the EU S&PM markets, the competitiveness of EU S&PM, the functioning of the internal market, the level of legal requirements, the administrative burden, the rapidity of the decision-making process, etc…)?

Please specify for each suggestion you support:

2.1.2.6. What are the disadvantages of suggestions you do not support (replies "not in favour" under 2.1.2.2) and their expected negative effects?

Please specify for each suggestion you do not support:

2.2. VCU TESTING

2.2.1. LESSONS FROM THE PAST

2.2.1.1. Have the Community provisions for VCU testing been effective in ensuring that any new variety is an improvement on marketed varieties? *(Only one answer possible per line of the table)*

	Not effective at all	Not much effective	Partly effective	Fully effective	Don't know	Not applicable
Community provisions for:						
Value for cultivation	☐	☐	☐	☐	☐	☐
Value for use	☐	☐	☐	☐	☐	☐

If your answer is 'not at all', 'not much' or 'partly', please comment on your it, by specifying the problem:

2.2.1.2. Have the Community requirements been sufficient and relevant to bring the same guarantee to the users of each Member State? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

2.2.1.3. Have some VCU requirements limited the marketing of varieties of interest to users? *(Only one answer possible)*

☐ Yes ☐ No ☐ Don't know ☐ Not applicable

If your answer is 'yes', please specify which requirements :

2.2.1.4. To what extent are the costs involved in fulfilling the obligations for VCU testing reasonable and proportionate? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

2.2.1.5 .To what extent has the public authority transferred the cost of VCU testing to the industry? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer, by specifying the percentage of cost transfer, if any:

2.2.1.6. To what extent is the current distribution (between industry and public authorities) of the costs of operating the VCU testing appropriate? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

2.2.2. SUGGESTIONS FOR THE FUTURE

2.2.2.1. What should be done in the future regarding the Community VCU provisions? *(Only one answer possible per line of the table)*

Suggestions	In favour	Not in favour	Don't know	Not applicable
Remove the VCU provisions from the EU legislation	☐	☐	☐	☐
Reduce the Community VCU provisions	☐	☐	☐	☐
Maintain the Community VCU provisions as they currently stand	☐	☐	☐	☐
Maintain the Community VCU provisions for a reduced number of crops/species	☐	☐	☐	☐
Maintain the Community VCU provisions for a limited number of final uses (*e.g. use in food or non food sectors)*	☐	☐	☐	☐
Maintain the Community VCU provisions for a limited number of users (*e.g. professional users or non professional users*)	☐	☐	☐	☐
Enlarge the Community VCU provisions to criteria such as food and environmental safety aspects where appropriate	☐	☐	☐	☐
Reinforce the Community VCU provisions criteria for a harmonised use	☐	☐	☐	☐

by all Member States				
Other: *Please specify :*	☐	☐	☐	☐

2.2.2.2. If you are in favour of maintaining the Community VCU provisions for a reduced or larger number of crops/species, please specify the criteria that should be used for determining which species should be removed or added.

Please specify:

2.2.2.3. If you are in favour of maintaining the Community VCU provisions for a limited number of final uses or users, please specify which ones.

Please specify:

2.2.2.4. What should be done in the future regarding the operational organisation of VCU testing? *(Only one answer possible per line of the table)*

Suggestions	In favour	Not in favour	Don't know	Not applicable
Organise the official VCU testing at Community level, based on areas of adaptation (European networks according to agroclimatic areas for national and regional decisions)	☐	☐	☐	☐
Organise the VCU testing at the level of the breeders, under official supervision	☐	☐	☐	☐
Stimulate the VCU testing at the level of the breeders without official control or supervision	☐	☐	☐	☐
Allow recognition of other Member States' VCU data for national listing (bilateral agreement)	☐	☐	☐	☐
Allow coordination between Member States of official observations and national decisions possibly under bilateral agreements	☐	☐	☐	☐
Other: *Please specify :*	☐	☐	☐	☐

2.2.2.5. If you are in favour of allowing recognition of other Member States' VCU data for national listing, please specify under which condition(s) it should be established.

Please specify:

2.2.2.6. For each suggestion you support (in 2.2.2.4 "in favour"), please estimate the expected effects on cost and staff and specify the parties concerned (Commission, the national registration authorities and/or the private operators).

Supported suggestions	% of reduction of costs	% of reduction of staff	Parties concerned		
			Commission	National authorities	Private operators
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

2.2.2.7. What are the advantages of the suggestions you support (in 2.2.2.1 and 2.2.2.4 "in favour") and their expected positive effects (for example, on the user, the organisation of the EU S&PM markets, the competitiveness of EU S&PM, the functioning of the internal market, the level of legal requirements, the administrative burden, the rapidity of the decision-making process, etc…)?

Please specify for each suggestion you support:

2.2.2.8. What are the disadvantages of suggestions you do not support (in 2.2.2.1 and 2.2.2.4 "not in favour) or their expected negative effects?

Please specify for each suggestion you do not support:

2.3. VARIETY DENOMINATION

2.3.1. LESSONS FROM THE PAST

2.3.1.1. Have the Community provisions for the variety denomination been effective in ensuring that varieties are designated in all members of the Union by the same variety denomination? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

If your answer is 'not at all', 'not much' or 'partly', please comment on it, by specifying the problem:

2.3.1.2. Have some variety denomination requirements limited the marketing of varieties of interests to users? *(Only one answer possible)*

☐ Yes ☐ No ☐ Don't know ☐ Not applicable

If your answer is 'yes', please specify which requirements:

2.3.1.3. Does the time required for validation of a variety denomination by the official bodies negatively impact on the marketing of S&PM? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

2.3.2. SUGGESTIONS FOR THE FUTURE

2.3.2.1. Is the current system of variety denomination sustainable in the future? *(Only one answer possible)*

☐ Yes ☐ No ☐ Don't know ☐ Not applicable

Please comment on your answer:

2.3.2.2. What should be done in the future regarding the variety denomination? *(Only one answer possible per line of the table)*

Suggestions	In favour	Not in favour	Don't know	Not applicable
Maintain the variety denomination Community Regulation as it currently stands	☐	☐	☐	☐
Revise the system of variety denomination (i.e. in the form of a 'fancy name' or a 'code')	☐	☐	☐	☐
Remove the variety denomination regulation	☐	☐	☐	☐
Other: *Please specify :*	☐	☐	☐	☐

2.3.2.3. What are the advantages of the suggestions you support and their expected effects on the marketing of S&PM, the level of legal requirements, the administrative burden, the costs, the rapidity of the decision-making process, etc?

Please specify for each suggestion you support:

2.3.2.4. What are the disadvantages of suggestions you do not support or their expected negative effects?

Please specify for each suggestion you do not support:

2.4. COMMON CATALOGUES

2.4.1. LESSONS FROM THE PAST

2.4.1.1. Does your organisation use the common catalogues? *(Only one answer possible)*

☐ Yes ☐ No ☐ Don't know ☐ Not applicable

If your answer is 'yes', please specify the purpose for which they are used:

If your answer is 'yes'

How frequently are they used? (Only one answer possible)

☐ Occasionally ☐ Regularly ☐ Very often ☐ Don't know ☐ Not applicable

At which level? (Only one answer possible)

☐ All staff ☐ Headquarters only ☐ Other level (please, specify:) ☐ Not applicable

Please comment on your answer:

2.4.1.2. Does the lapse of time required between the national registration and the publication in the common catalogues negatively impact on the marketing of S&PM? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

2.4.2. SUGGESTIONS FOR THE FUTURE

2.4.2.1. What should be done in the future regarding the national and common catalogues? *(Only one answer possible per line of the table)*

Suggestions	In favour	Not in favour	Don't know	Not applicable
Maintain both the national and common catalogues as they currently stand	☐	☐	☐	☐
Stop national catalogues and only work with common catalogues	☐	☐	☐	☐
Work with common catalogues and allow Member States to have national catalogues on a voluntary basis	☐	☐	☐	☐
Other: *Please specify :*	☐	☐	☐	☐

2.4.2.2. What are the advantages of the suggestions you support and their expected positive effects (for example: on the marketing of S&PM, the level of legal requirements, the administrative burden, the costs, the rapidity of the decision-making process, etc.)?

Please specify for each suggestion you support:

2.4.2.3. What are the disadvantages of suggestions you do not support or their expected negative effects?

Please specify for each suggestion you do not support:

2.4.2.4. If you are in favour of maintaining the common catalogues, is it desirable to modify them in terms of their accessibility, user-friendliness, number of updates, and elements of information they contain?
Accessibility*, i.e. time required to access the common catalogue (Only one answer possible)*

☐ Yes ☐ No ☐ Don't know ☐ Not applicable

User-friendliness*, i.e. time required to find the required information (Only one answer possible)*

☐ Yes ☐ No ☐ Don't know ☐ Not applicable

Number of updates *(Only one answer possible)*

☐ Same ☐ More ☐ Less ☐ Don't know ☐ Not applicable

Elements of technical information they contain *(Only one answer possible)*

☐ Same ☐ More ☐ Less ☐ Don't know ☐ Not applicable

Please comment on your answer:

2.4.2.5. What are the advantages or disadvantages of any modification of the common catalogues and their expected effects (negative or positive) on the level of legal requirements, administrative burden, and associated costs? Which are the elements of technical information that you would like to delete or add?

Please specify:

2.5. CONCLUSIONS

2.5.1.What are the most important lessons from the past, if any, concerning the current Community 'acquis' on variety /material registration of S&PM?

Please specify:

2.5.2. Which are the most important suggestions, if any, you would formulate for the future Community 'acquis' on variety/material registration of S&PM?

Please specify:

2.5.3. Which are the most important suggestions, if any, you would formulate to reduce the costs incurred by the public authorities and the private operators for the variety/material registration of S&PM, while guaranteeing the same level of quality?

Please specify:

SECTION 3. CERTIFICATION

Note
The questions of this section do not apply to crops covered by Directives 92/33/EEC (vegetable propagating and planting material, other than seed) and 98/56/EC (ornamental plants).

Concerning vegetable seed (Directive 2002/55/EC), they apply for vegetable certified seed

and for post control measures of standard seed.

For forestry material (Directive 1999/105/EC), certification should be understood as "any procedure carried out by the official body as defined under the provisions of article Art 2, (k) of Directive 1999/105/EC and leading to the authorisation for marketing of lots of forest reproductive material".

If you answer this questionnaire for the group 'Seed', please specify for which crops (group of crops) you answer this specific section (please tick all relevant boxes).

66/401/EEC (fodder plants)	☐
66/402/EEC (cereals)	☐
2002/54/EC (beet seed)	☐
2002/55/EC (vegetable) Vegetable certified seed and post control measures of standard seed)	☐
2002/56/EC (seed potatoes)	☐
2002/57/EC (oil and fibre plants)	☐

If you answer this questionnaire for the group 'Propagating material', please specify for which crops (group of crops) you answer this specific section (please tick all relevant boxes).

68/193/EEC (vine)	☐
92/34/EEC (fruit)	☐

3.1. LESSONS FROM THE PAST

3.1.1. Have the Community provisions for the certification of S&PM been effective in ensuring S&PM lots of sufficient quality? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

If your answer is 'not at all', 'not much' or 'partly', please comment on it, by specifying the problem:

3.1.2. Have the Community provisions for the certification of S&PM been effective in facilitating the free marketing of the S&PM in the EU? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

If your answer is 'not at all', 'not much' or 'partly', please comment on it, by specifying the problem:

3.1.3. Are the current quality standards relevant for the purpose of certification? *(Only one answer possible per line of the table)*

Quality standard	Not relevant at all	Not much relevant	Partly relevant	Fully relevant	Don't know	Not applicable
Identity	☐	☐	☐	☐	☐	☐
Varietal Purity	☐	☐	☐	☐	☐	☐
Germination	☐	☐	☐	☐	☐	☐
Health	☐	☐	☐	☐	☐	☐
Other: *Please specify:*	☐	☐	☐	☐	☐	☐

Please comment on your answer, by specifying the problem if 'not at all', 'not much' or 'partly':

3.1.4. To what extent are the costs involved in fulfilling the obligations imposed by the Community provisions for certification reasonable and proportionate? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

3.1.5. To what extent is the current distribution (between industry and public authorities) of the costs of operating certification appropriate? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

3.1.6. Did the organisation of certification in your country move from an official system (official examination) to a system of certification under official supervision? *(Only one answer possible)*

☐ Yes ☐ No ☐ Don't know ☐ Not applicable

If 'yes', what have been the impacts of such modification (for example on costs, planning, logistics, flexibility, responsibility, etc)?

Please comment on your answer, by specifying the percentage of cost transfer, if any:

3.1.7. Are the EC standards for the certification of S&PM coherent with OECD standards? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

3.1.8. Are the EC standards for the certification of S&PM coherent with UN-ECE standards (seed potatoes)? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

3.1.9. Are Community comparative trials an appropriate tool for ensuring harmonization of inspection practices contributing to S&PM lots of sufficient quality? *(Only one answer possible)*

☐ Not at all ☐ Not much ☐ Partly ☐ Fully ☐ Don't know ☐ Not applicable

Please comment on your answer:

3.2. SUGGESTIONS FOR THE FUTURE

3.2.1. What should be done in the future regarding certification? *(Only one answer possible per line of the table)*

Suggestions	In favour	Not in favour	Don't know	Not applicable
STATUS QUO				
Maintain the certification standards as they currently stand	☐	☐	☐	☐
Maintain the certification structures as they currently stand	☐	☐	☐	☐
REVISE THE CERTIFICATION BY:				
Revise the requirements				
Decrease the number of species covered by the Seed Marketing Directives (*by e.g. removing those of minor economic importance)*	☐	☐	☐	☐
Increase the number of species covered by the Seed Marketing Directives	☐	☐	☐	☐
Decrease the number of standards	☐	☐	☐	☐
Increase the number of standards	☐	☐	☐	☐
Revise the levels set in the quality standards (e.g. germination %)	☐	☐	☐	☐
Extend the field inspection "under official supervision" to pre-basic and basic crops	☐	☐	☐	☐
In the case of certification "under official supervision", revise the minimum 5% check testing, check inspection and check sampling	☐	☐	☐	☐
In the case of certification "under official supervision", leave the level of check testing, check inspection and check samples to Member States' discretion, based on their own assessments of the risk to seed quality.	☐	☐	☐	☐
In the case of certification "under official supervision", target inspection on the basis of risk (taking into	☐	☐	☐	☐

consideration the higher voluntary standards in place, industry inspections, track records, etc.)				
Apply controls/certification standards to final generation S&PM only and leave companies to decide how to manage parental generation S&PM production to meet the quality standards of final generation certified lots of the category under which the S&PM is marketed	☐	☐	☐	☐
Apply controls/certification to parental generations only and leave companies to decide how to manage commercial S&PM production to meet the quality standards of final generation certified lots of the category under which the S&PM is marketed	☐	☐	☐	☐
Other: *Please specify:*	☐	☐	☐	☐
Revise the operational organisation				
Integrate the inspection regimes for certification and for plant health	☐	☐	☐	☐
Set up a certification with a system of an accreditated third party private body approved by the Member State	☐	☐	☐	☐
Set up a certification with a system of a S&PM company accreditation.	☐	☐	☐	☐
Limit the official certification scheme to a basic level defined in the legislation and have extra quality requirements left up to private companies	☐	☐	☐	☐
Set up a voluntary certification scheme to national, or international (i.e. OECD) standards	☐	☐	☐	☐
Remove the official certification system and pass on the full producer's liability	☐	☐	☐	☐
Other : *Please specify :*	☐	☐	☐	☐

3.2.2. If you are in favour of decreasing or increasing the number of species covered by the Seed Marketing Directives, please specify which ones.

Please specify:

3.2.3. If you are in favour of increasing or decreasing the number of standards, please specify which ones

Please specify:

3.2.4. If you are in favour of revising the levels set in the quality standards, please specify how and for which standard?

Please specify:

3.2.5. For each suggestion you support (in 3.2.1.,"in favour"), please estimate the expected positive effects on cost and staff and specify the parties concerned (Commission, the national certification authorities and/or the private operators).

Supported suggestions	% of reduction of costs	% of reduction of staff	Parties concerned		
			Commission	National authorities	Private operators
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

3.2.6. What are the advantages of the suggestions you support (in 3.2.1. "in favour") and their expected positive effects (for example on the user, the organisation of the EU S&PM markets, the competitiveness of EU S&PM, the functioning of the internal market, the level of legal requirements, the administrative burden, the rapidity of the decision-making process, etc)?

Please specify for each suggestion you do not support:

3.2.7. What are the disadvantages of the different options you do not support (in 3.2.1. "not in favour") or their expected negative effects?

Please specify for each suggestion you do not support:

3.3. CONCLUSIONS

3.3.1. What are the most important lessons from the past, if any, concerning the current Community 'acquis' on certification of S&PM?

Please specify:

3.3.2. Which are the most important suggestions, if any, you would formulate for the future Community 'acquis' on certification of S&PM?

Please specify:

3.3.3. Which are the most important suggestions, if any, you would formulate to reduce the costs incurred by the public authorities and the private operators for the certification of S&PM, while guaranteeing the same level of quality?

Please specify:

SECTION 4. ROLE OF THE CPVO

Note: A Working Group, managed by DG SANCO, on the possible extension of the activities of the Community Plant Variety Office has been established in 2006 and has met 6 times during the last two years. Proposals are under discussion. The evaluation team has been provided with the current outcomes of this working group. The purpose of this question is to validate and/or further investigate on the relevance of the proposals by a larger group of stakeholders.

4.1. What should be the role of the CPVO in the future, in addition to considering applications for protection of variety rights? *(Only one answer possible per line of the table)*

Suggestions	In favour	Not in favour	Don't know	Not applicable
Active role in variety denomination	☐	☐	☐	☐
Active role in VCU testing	☐	☐	☐	☐
Active role in DUS testing for variety listing	☐	☐	☐	☐
Active role in the administrative management of the Common Catalogue and national listing	☐	☐	☐	☐
Active role for management of comparative trials	☐	☐	☐	☐
Active role for management of of tasks to equivalence with third countries	☐	☐	☐	☐
Active role in the administrative management of conservation varieties	☐	☐	☐	☐
Other: *Please specify:*	☐	☐	☐	☐

Please comment on your answer by providing your view on the respective roles of the Commission, the MS and the CPVO in the future regarding the 'acquis' on the marketing of S&PM:

4.2. What are the advantages of the different options you support or their expected positive effects on the economy, the level of legal requirements, the administrative burden, the associated costs, the rapidity of the decision-making process, etc?

Please specify for each suggestion you support:

4.3. What are the disadvantages of the different options you do not support or their expected negative effects?

Please specify for each suggestion you do not support:

Thank you!

Annex 3 – Costs questionnaire

Evaluation of the Community *acquis* on the marketing of Seed and plant Propagating Materials (S&PM)

Costs questionnaire

SURVEY by the FCEC (Food Chain Evaluation Consortium)

INTRODUCTION

This survey takes place in the framework of the evaluation of the Community acquis on the marketing of Seed and Plant Propagating Materials (S&PM).

The objective is to collect data on costs for the activities of variety registration and certification. Such data collection focuses on the major cost centres at the pre-registration, registration, post-registration, certification and post-certification stages.

The survey questionnaire is divided into two sections as follows:

Section 1: Variety registration
- Pre-registration costs
- Registration costs
  - DUS test
  - VCU test
- Post-registration costs

Section 2: Certification
- Costs of certification under official examination (inspections and testing carried out by official competent body)
- Costs of certification under official supervision (inspections and testing carried out by trained staff of authorised seed companies)
- Post-certification costs

This questionnaire is **a general one** and targets both the national authorities and the private operators. Please only consider the parts and sections relevant to your organization, i.e.: left-hand side for national authorities and right-hand side for private operators.

The survey targets the **seed sector only** and not the sectors of Propagating material and Forestry material.

Amounts should be related to **annual budget figures and should concern the combined costs for the applications or varieties for which you fill in the questionnaire. Private operators should take account of fees paid.**

It could be that some parts of the questionnaire are difficult to answer. All questions have a box comments. If you are unable to stick to the format defined for any question but wish to give an answer, please do so and explain how you have approached the question in the box for comment.

The questionnaire should be completed in English.

The confidentiality of your responses and statements is guaranteed in the sense that your organisation will be mentioned as having responded to the survey but that none of the comments and remarks included in the evaluation report will be identifiable.

The ultimate objective of the data collection on the costs is to get a reliable basis for comparison between the current costs associated with the implementation of the EU S&PM acquis and the costs associated with the main options for a revision of the acquis. We therefore greatly appreciate your contribution.

If you have any further questions, do not hesitate to contact:

Anastasio SOFIAS :
phone: +32 2 641 00 11 fax: +32 2 641 00 30 e-mail: aso@bvdmc.com

Please return this questionnaire by e-mail to Anastasio SOFIAS (aso@bvdmc.com) before the 3rd of May 2008. If you answer on behalve of national authorities, please also attach to your response the list of fees applicable in your country.

IDENTIFICATION DATA

Please identify your organisation:

Name of organisation:	
Department within the organisation:	
Organisation located in (country):	

Type of organisation:

Policy making authority	
Variety registration authority	
Certification authority	
Professional associations of USERS of S&PM (including organic farming)	
Professional associations of SUPPLIERS of S&PM (breeders and multipliers)	
Other stakeholders:.....	

Questionnaire completed by:

Name of the person filling in the questionnaire	
Position within the organisation:	
Telephone number:	
Email address:	

The survey targets the **seed sector only**.

Amounts should be related to **annual budget figures.**

Please specify the year of the figures you provide?	

For which country are you answering this questionnaire?

Country/International organisation concerned:	

Please go now to the next sheet to provide estimations on costs.

SECTION 1 - VARIETY REGISTRATION

Can you give an estimate of the annual costs involved in fulfilling the following pre-registration, registration and post-registration obligations (boxes in orange)? Please note that the annual costs should concern the combined costs for the applications for which you fill in the questionnaire. For each cost you estimate, please provide additional data on the intensity or frequency of the related tasks (boxes in blue). Fees are one of the cost elements to be taken into account by private operators.

For which seed crops are you answering this section (to be filled in by national authorities and private operators)?

All seed crops	
Fodder plant seed (Council Directive [illegible])	
Cereal seed (Council Directive 66/402/EEC)	
Beet seed (Council Directive 2002/54/EC)	
Vegetable seed (Council Directive 2002/55/EC)	
Seed potatoes (Council Directive 2002/56/EC)	
Seed of oil and fibre plants (Council Directive 2002/57/EC)	
Other: (*please specify)*	

1.1. PRE-REGISTRATION COSTS (If relevant)

The possible cost elements are:
- For registration authority: not specified
- For private operator: Production of preliminary data (Value for Cultivation or Use or "VCU"), Production of data for application submission (Distinct, Uniform and Stable or "DUS"), Administrative costs for applications preparation and submission, Possible fees.

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for registration authority				**Annual costs for private operator**			

Please comment on your answer by specifying the cost elements it refers to:

1.2. REGISTRATION COSTS

1.2.1 DUS Test

The possible cost elements are:
- For registration authority: Technical and administrative management of demands, Planning of experimentation, Reception and disposal of materials, Conducting of experimentation, Networks management and co-ordination, Trials approval including field visits, Validation and treatment of data and Maintenance of reference samples of varieties.
- For private operator: Technical and administrative management of demands, Field visits, Possible fees.

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for registration authority				**Annual costs for private operator**			

Annual number of applications received (varieties + components when relevant)		Annual number of applications submitted for DUS testing (varieties + components when relevant)	
Annual number of DUS trial locations			
What part of the costs is paid by the applicant (%)			

Please comment on your answer by specifying the cost elements it refers to:

1.2.2. VCU Test

The possible cost elements are:
- For registration authority and for private operators. Technical and administrative management of demands, Planning of experimentation, Reception and disposal of materials, Conducting of experimentation, Networks management and co-ordination, Trials approval including field visits and Validation and treatment of data.
- For private operators: Possible fees.

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for registration authority				**Annual costs for private operator**			

Annual number of applications received (varieties + components when relevant)		Annual number of applications submitted for VCU testing (varieties + components when relevant)	
Annual number of VCU trial locations			
What part of the costs is paid by the applicant (%)			

Please comment on your answer by specifying the cost elements it refers to:

1.2.3. Administrative management of approved varieties

The possible cost elements are:
- For registration authority: Denomination and Publications in Official Journals.
- For private operator: Denomination, Possible fees

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for registration authority				**Annual costs for private operator**			

Annual number of varieties/material approved

Please comment on your answer by specifying the cost elements it refers to:

1.3. POST-REGISTRATION COSTS (If relevant)

1.3.1. Maintenance of reference collections

	EUR	Don't know	Not applicable	
Annual costs for public authority				**Not applicable**

Please comment on your answer by specifying the cost elements it refers to:

1.3.2. Maintenance of breeding

		EUR	Don't know	Not applicable
Not applicable	**Annual costs for private operator**			

Please comment on your answer by specifying the cost elements it refers to:

SECTION 2 - CERTIFICATION

Can you give an estimate of the annual costs involved in fulfilling the following certification and post-certification obligations (boxes in orange) ? Please note that the annual costs should concern the combined costs for the varieties for which you fill in the questionnaire. For each cost you estimate, please provide additional data on the intensity or frequency of the related tasks (boxes in blue). Fees are one of the cost components to be taken into account by private operators.

This section is divided into three parts:
2.1. Costs of certification under official examination (inspections and testing carried out by official competent body)
2.2. Costs of certification under official supervision (inspections and testing carried out by trained staff of auhorised seed companies).
2.3. Post-certification costs.

In Member States where the possibility of certification under official supervision is not implemented, sub-section 2.2. (costs related to certification under official supervision) should not be filled in.
Member States' certification bodies and operators that implement the certification under official supervision shall fill in sub-section 2.1. where it concerns certification of seed potatoes and sub-section 2.2 for the other crops (fodder plants, cereals, sugar beet, oil and fiber plants).

For which seed crops are you answering this section (to be filled in by national authorities and private operators)?

All seed crops	
Fodder plant seed (Council Directive [illegible])	
Cereal seed (Council Directive 66/402/EEC)	
Beet seed (Council Directive 2002/54/EC)	
Vegetable seed (Council Directive 2002/55/EC)	
Seed potatoes (Council Directive 2002/56/EC)	
Seed of oil and fibre plants (Council Directive 2002/57/EC)	
Other: (*please specify)*	

For certification authority:

What part of the operational costs for seed certification is paid by (or transferred to) the applicants (%)	

2.1. COSTS OF CERTIFICATION UNDER OFFICIAL EXAMINATION

2.1.1 Registration of companies and seed-testing laboratories

The possible cost elements are:
- For certification authority: Administrative management of data basis, Audit of the capacity of companies to implement the certification system and Audit of the capacity of laboratories to analyse seed sampling.
- For private operator: Keeping of registers, Harmonisation of factory equipments, Harmonisation of laboratory equipments

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Annual costs for private operator**			

Annual number of visits for the purpose of company's authorisation or management of licenses	
Annual number of visits for the purpose of laboratory's authorisation or management of licenses	

Please comment on your answer by specifying the cost elements it refers to:

2.1.2 Official field inspection

The possible cost elements are:
- For certification authority: Organisation of official field inspection and Field inspection.
- For private operator: Demand of field inspections, Accompanying of official inspectors, Possible fees.

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Annual costs for private operator**			

Annual number of hectares inspected		Annual number of hectares	
Annual number of visits by inspector		Annual number of visits	
Annual number of hours of inspection			

Please comment on your answer by specifying the cost elements it refers to:

2.1.3 Official seed lot sampling and seed sample testing

2.1.3.1. Official seed lot sampling

The possible cost elements are:
- For certification authority: Official seed lot sampling.
- For private operator: Possible fees.

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Annual costs for private operator**			

Annual number of samples collected

Please comment on your answer by specifying the cost elements it refers to:

2.1.3.2. Official seed sample testing

The possible cost elements are:
- For certification authority: Analysis of samples by official laboratory.
- For private operator: Possible fees

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Annual costs for private operator**			

Annual number of samples tested

Please comment on your answer by specifying the cost elements it refers to:

2.1.4 Official labelling of lots

The possible cost elements are:
- For certification authority: Making and printing of official labels.
- For private operator: Affixing of official labels, Possible fees.

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Annual costs for private operator**			

Annual number of official labels printed

Annual number of official labels affixed

Please comment on your answer by specifying the cost elements it refers to:

2.2. COSTS OF CERTIFICATION UNDER OFFICIAL SUPERVISION

2.2.1. Authorisation of companies, seed-testing laboratories and staff belonging to companies by certification authority

The possible cost elements are:
- For certification authority:Administrative management of data basis, Audit of the capacity of companies to implement the certification system and Audit of the capacity of laboratories to analyse seed samples.
- For private operator: Keeping of register, Harmonization of factory equipment, Harmonization of laboratory equipment

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Annual costs for private operator**			

Annual number of visits for the purpose of company's authorisation or management of licenses	
Annual number of visits for the purpose of laboratory's authorisation or management of licenses	

Please comment on your answer by specifying the cost elements it refers to:

2.2.2 Field inspection by authorised staff

The possible cost elements are:
- For certification authority: Organisation of field inspection, Organisation of training courses and qualifications of staff and Field inspection.
- For private operator: Organisation of field inspection, Participation of staff in training courses and qualifications organised by the certification authority, Field inspection.

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Annual costs for private operator**			

Annual number of hectares inspected		Annual number of hectares	
Annual number of visits by inspector		Annual number of visits	
Annual number of hours of inspection			

Please comment on your answer by specifying the cost elements it refers to:

2.2.3 Seed lot sampling and seed sample testing by authorised staff

2.2.3.1. Seed lot sampling by authorised staff

The possible cost elements are:
- For certification authority: Organisation of training courses and qualifications of staff, Validation of sampling methodology applied by authorised samplers, Analysis of samples by official laboratories to check the performance of seed samplers
- For private operator: Training courses and qualifications of staff by the certification authority, Seed lot sampling by authorised staff.

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Annual costs for private operator**			

Annual number of lots certified		Annual number of lots sampled	

Please comment on your answer by specifying the cost elements it refers to:

2.2.3.2. Seed sample testing by authorised laboratories

The possible cost elements are:
- For certification authority: Organisation of training courses and qualifications for laboratory managers and analysts, Official control of results obtained by authorised company laboratories and Official sampling of lots and analysis of samples by official laboratories in order to check the performance of authorised laboratories.
- For private operator: Training courses and qualifications of laboratory managers and analysts by the certification authority, Seed sample testing by authorised laboratories

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Annual costs for private operator**			
Annual number of lots certified				Annual number of samples tested			

Please comment on your answer by specifying the cost elements it refers to:

2.2.4 Labelling of lots by authorised staff

The possible cost elements are:
- For certification authority: Organisation of training courses and qualifications of staff, Making and printing of official labels
- For private operator: Training courses and qualifications of staff by the certification authority, Complementary printing of official labels, Affixing of official labels, Possible fees

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Annual costs for private operator**			
Annual number of official labels made				Annual number of official labels made			

Please comment on your answer by specifying the cost elements it refers to:

2.3. POST-CERTIFICATION COSTS

2.3.1 Official post-control examination of varietal identity and purity

The possible cost elements are:
- For certification authority: Seed lot sampling, Plot sowing and plots inspection and Processing of results.
- For private operator: Visits

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Annual costs for private operator**			

Annual number of seed samples sown (samples from multiplication fields and earlier generations + reference samples of varieties)

Please comment on your answer by specifying the cost elements it refers to:

2.3.2 Official recording of control by certification authority

The possible cost elements are:
- For certification authority: Processing of control results.
- For private operator: Not applicable

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for certification authority				**Not applicable**			

Please comment on your answer by specifying the cost elements it refers to:

2.3.3 Official control of marketing (if relevant)

The possible cost elements are:
- For public authority: Seed lot sampling and Sample testing by official laboratories.
- For private operator: not specified

	EUR	Don't know	Not applicable		EUR	Don't know	Not applicable
Annual costs for public authority				**Annual costs for private operator**			

Annual number of samples collected and tested

Please comment on your answer by specifying the cost elements it refers to:

2.3.4 Comparative tests & trials

	EUR	Don't know	Not applicable	
Annual costs for national public authorities				**Not applicable**

	EUR	Don't know	Not applicable
Annual costs for EC authorities			

Please comment on your answer by specifying the cost elements it refers to:

Thank you!

Annex 4 – Results of the qualitative survey

Evaluation of the Community *'acquis'* on the marketing of seed and plant propagating material (S&PM) - Qualitative questionnaire - Survey by the FCEC (Food Chain Evaluation Consortium)

SECTION 1 - OVERALL COMMUNITY *'ACQUIS'*

1.1. LESSONS FROM THE PAST

1.1.1. Has the EU S&PM *'acquis'* been effective in ensuring the marketing of new varieties with better characteristics?

	Nbr. of answers	% of answers
Not at all	10	4,76%
Not much	14	6,67%
Partly	92	43,81%
Fully	94	44,76%
Grand Total	**210**	**100,00%**
Don't know	*14*	
Not applicable	*18*	

1.1.2. Has the EU S&PM *'acquis'* been effective in ensuring the marketing of S&PM of sufficient quality?

	Nbr. of answers	% of answers
Not at all	2	0,87%
Not much	8	3,48%
Partly	94	40,87%
Fully	126	54,78%
Grand Total	**230**	**100,00%**
Don't know	*11*	
Not applicable	*1*	

1.1.3. Has the EU S&PM *'acquis'* been effective in facilitating the free marketing of the S&PM in the EU?

	Nbr. of answers	% of answers
Not at all	12	5,26%
Not much	8	3,51%
Partly	98	42,98%
Fully	110	48,25%
Grand Total	**228**	**100,00%**
Don't know	*9*	
Not applicable	*1*	

1.1.4. Have the following elements had a positive, negative or no impact on the free marketing of S&PM?

	Nbr. of answers	% of answers
Lack of harmonisation between national provisions		
Positive impact	22	10,43%
Negative impact	144	68,25%
No impact	45	21,33%
Grand Total	**211**	**100,00%**
Don't know	*15*	
Not applicable	*10*	
Impediments created by national official or semi-official bodies		
Positive impact	12	10,43%
Negative impact	156	68,25%
No impact	29	21,33%
Grand Total	**197**	**100,00%**
Don't know	*26*	
Not applicable	*13*	
Existence of national and common catalogues		
Positive impact	176	83,41%
Negative impact	17	8,06%
No impact	18	8,53%
Grand Total	**211**	**100,00%**
Don't know	*10*	
Not applicable	*16*	
Community 'acquis' on plant health (DG SANCO)		
Positive impact	163	81,09%
Negative impact	27	13,43%
No impact	11	5,47%
Grand Total	**201**	**100,00%**
Don't know	*32*	
Not applicable	*4*	
Community 'acquis' on plant protection products (DG SANCO)		
Positive impact	36	22,22%
Negative impact	97	59,88%
No impact	29	17,90%
Grand Total	**162**	**100,00%**
Don't know	*54*	
Not applicable	*20*	

	Nbr. of answers	% of answers
Autorisation for cultivation of GMO's		
Positive impact	24	15,38%
Negative impact	102	65,38%
No impact	30	19,23%
Grand Total	**156**	**100,00%**
Don't know	*36*	
Not applicable	*43*	
Environmental policy (e.g. DG ENV)		
Positive impact	30	20,00%
Negative impact	67	44,67%
No impact	53	35,33%
Grand Total	**150**	**100,00%**
Don't know	*72*	
Not applicable	*14*	
Trade policy agreement, TBT agreement		
Positive impact	102	66,23%
Negative impact	21	13,64%
No impact	31	20,13%
Grand Total	**154**	**100,00%**
Don't know	*71*	
Not applicable	*9*	
Other		
Positive impact	26	59,09%
Negative impact	18	40,91%
Grand Total	**44**	**100,00%**
Don't know	*3*	
Not applicable	*2*	

The 'Other' category refers to the following items:
* Community PBR: 21 positive mentions
* Quality and liability of information about varieties, seeds and PM: 4 positive mentions
* Farmers' privilege for farm saved seed: 1 positive mention
* Lack of harmonisation between PBR and Trademarks as well as lack of unity in denominations between national PBR and EU PBR and the ICRA: 7 negative mentions
* Poor enforcement on intellectual property: 3 negative mentions
* National Recommended lists: 3 negative mentions
* Lack of consideration of conservation varieties: 2 negative mentions
* Lack of harmonisation in the implementation of the organic seed legislation: 2 negative mentions
* Not harmonised supplier's document for FRM: 1 negative mention
* 1 remaining mention: not clearly specified

1.1.5. Has the EU S&PM 'acquis' had a positive, negative or no impact on the following elements?

	Nbr. of answers	% of answers
The competitiveness of S&PM within the EU		
Positive impact	175	84,13%
Negative impact	3	1,44%
No impact	30	14,42%
Grand Total	**208**	**100,00%**
Don't know	*22*	
Not applicable	*4*	
The competitiveness on the world markets of S&PM produced in the EU		
Positive impact	145	78,38%
Negative impact	9	4,86%
No impact	31	16,76%
Grand Total	**185**	**100,00%**
Don't know	*42*	
Not applicable	*11*	
The income of plant breeders		
Positive impact	136	80,00%
Negative impact	9	5,29%
No impact	25	14,71%
Grand Total	**170**	**100,00%**
Don't know	*57*	
Not applicable	*11*	
The income of S&PM producers		
Positive impact	143	82,66%
Negative impact	8	4,62%
No impact	22	12,72%
Grand Total	**173**	**100,00%**
Don't know	*57*	
Not applicable	*8*	
The income of farmers		
Positive impact	134	79,29%
Negative impact	15	8,88%
No impact	20	11,83%
Grand Total	**169**	**100,00%**
Don't know	*55*	
Not applicable	*12*	

	Nbr. of answers	% of answers
The preservation of plant genetic resources in the EU		
Positive impact	100	52,63%
Negative impact	36	18,95%
No impact	54	28,42%
Grand Total	**190**	**100,00%**
Don't know	*34*	
Not applicable	*13*	
The funding of plant breeding improvement efforts		
Positive impact	115	74,19%
Negative impact	4	2,58%
No impact	36	23,23%
Grand Total	**155**	**100,00%**
Don't know	*70*	
Not applicable	*13*	
The control of plant diseases		
Positive impact	178	84,76%
Negative impact	9	4,29%
No impact	23	10,95%
Grand Total	**210**	**100,00%**
Don't know	*18*	
Not applicable	*9*	

1.1.6. How do you assess the provisions of the S&PM *'acquis'* regarding the following elements?

	Nbr. of answers	% of answers
Easy to understand		
Not at all	6	2,59%
Not much	75	32,33%
Partly	110	47,41%
Fully	41	17,67%
Grand Total	**232**	**100,00%**
Don't know	*5*	
Not applicable	*1*	
Easy to implement		
Not at all	6	2,79%
Not much	30	13,95%
Partly	142	66,05%
Fully	37	17,21%
Grand Total	**215**	**100,00%**
Don't know	*16*	
Not applicable	*7*	
Usefulness		
Not at all	2	0,87%
Not much	7	3,03%
Partly	135	58,44%
Fully	87	37,66%
Grand Total	**231**	**100,00%**
Don't know	*5*	
Not applicable	*1*	
Consistency between the provisions of the different EU S&PM Directives		
Not at all	5	2,66%
Not much	15	7,98%
Partly	105	55,85%
Fully	63	33,51%
Grand Total	**188**	**100,00%**
Don't know	*43*	
Not applicable	*6*	
Consistency between the provisions of the EU S&PM 'acquis' and those of other regulations at EU and/or international level		
Not at all	6	3,19%
Not much	32	17,02%
Partly	129	68,62%
Fully	21	11,17%
Grand Total	**188**	**100,00%**
Don't know	*42*	
Not applicable	*4*	

1.1.7. How do you rate the value of the following Directives?

	Nbr. of answers	% of answers
66/401/EEC (fodder plant seed)		
Little value	3	3,00%
Valuable	40	40,00%
Very valuable	57	57,00%
Grand Total	**100**	**100,00%**
Don't know	*29*	
Not applicable	*73*	

	Nbr. of answers	% of answers
66/402/EEC (cereal seed)		
Little value	1	1,01%
Valuable	40	40,40%
Very valuable	58	58,59%
Grand Total	**99**	**100,00%**
Don't know	*30*	
Not applicable	*76*	
2002/54/EC (beet seed)		
No value	2	2,27%
Little value	12	13,64%
Valuable	30	34,09%
Very valuable	44	50,00%
Grand Total	**88**	**100,00%**
Don't know	*36*	
Not applicable	*79*	
2002/55/EC (vegetable seed)		
No value	1	1,03%
Little value	6	6,19%
Valuable	69	71,13%
Very valuable	21	21,65%
Grand Total	**97**	**100,00%**
Don't know	*33*	
Not applicable	*66*	
2002/56/EC (seed potatoes)		
Little value	4	4,08%
Valuable	47	47,96%
Very valuable	47	47,96%
Grand Total	**98**	**100,00%**
Don't know	*31*	
Not applicable	*78*	
2002/57/EC (seed of oil and fibre plants)		
Valuable	38	37,25%
Very valuable	64	62,75%
Grand Total	**102**	**100,00%**
Don't know	*32*	
Not applicable	*69*	
68/193/EEC (material for vegetative propagation of the wine)		
No value	2	3,92%
Little value	3	5,88%
Valuable	31	60,78%
Very valuable	15	29,41%
Grand Total	**51**	**100,00%**
Don't know	*54*	
Not applicable	*86*	
92/33/EEC (vegetable propagating and planting material other than seed)		
No value	1	1,56%
Little value	15	23,44%
Valuable	39	60,94%
Very valuable	9	14,06%
Grand Total	**64**	**100,00%**
Don't know	*46*	
Not applicable	*79*	
92/34/EEC (fruit plant PM & fruit plants intended for fruit production)		
No value	2	3,13%
Little value	11	17,19%
Valuable	42	65,63%
Very valuable	9	14,06%
Grand Total	**64**	**100,00%**
Don't know	*47*	
Not applicable	*85*	
98/56/EC (ornamental plants)		
No value	4	5,41%
Little value	16	21,62%
Valuable	45	60,81%
Very valuable	9	12,16%
Grand Total	**74**	**100,00%**
Don't know	*47*	
Not applicable	*74*	
1999/105/EC (forest reproductive material)		
No value	1	2,13%
Little value	3	6,38%
Valuable	27	57,45%
Very valuable	16	34,04%
Grand Total	**47**	**100,00%**
Don't know	*53*	
Not applicable	*88*	

	Nbr. of answers	% of answers
2002/53/EC (common catalogue of varieties of agricultural plant species)		
Little value	9	7,14%
Valuable	38	30,16%
Very valuable	79	62,70%
Grand Total	**126**	**100,00%**
Don't know	*19*	
Not applicable	*60*	

1.1.8. To what extent do S&PM lots imported under the equivalence regime offer the same (or worse, or better) guarantee as the S&PM produced in the EU?

	Nbr. of answers	% of answers
Same guarantee	106	70,20%
Worse guarantee	43	28,48%
Better guarantee	2	1,32%
Grand Total	**151**	**100,00%**
Don't know	*50*	
Not applicable	*34*	

1.1.9. Are rules on variety maintenance necessary?

	Nbr. of answers	% of answers
Not at all	4	2,02%
Not much	5	2,53%
Partly	41	20,71%
Fully	148	74,75%
Grand Total	**198**	**100,00%**
Don't know	*7*	
Not applicable	*29*	

1.1.10. Are rules on variety maintenance cost-effective?

	Nbr. of answers	% of answers
Not at all	4	3,08%
Not much	10	7,69%
Partly	73	56,15%
Fully	43	33,08%
Grand Total	**130**	**100,00%**
Don't know	*73*	
Not applicable	*30*	

1.2.1. The main need felt at the time when the S&PM *'acquis'* was first adopted was to improve the productivity of agriculture. Today, what would be the main aims when revising the Community S&PM legislation (*'acquis'*)?

	Nbr. of answers	% of answers
Productivity		
Very important	64	36,57
Important	79	45,14
Fairly important	26	14,86
Not/not much important	6	3,43
Grand Total	**175**	**100,00**
Suitability of varieties for low-input agriculture		
Very important	15	10,20
Important	36	24,49
Fairly important	60	40,82
Not/not much important	36	24,49
Grand Total	**147**	**100,00**
Protection of the environment		
Very important	23	13,77
Important	64	38,32
Fairly important	69	41,32
Not/not much important	11	6,59
Grand Total	**167**	**100,00**
Food safety		
Very important	42	29,17
Important	53	36,81
Fairly important	40	27,78
Not/not much important	9	6,25
Grand Total	**144**	**100,00**
Plant health		
Very important	87	43,72
Important	75	37,69
Fairly important	30	15,08
Not/not much important	7	3,52
Grand Total	**199**	**100,00**

	Nbr. of answers	% of answers
Sufficient quality of S&PM		
Very important	110	56,70
Important	50	25,77
Fairly important	27	13,92
Not/not much important	7	3,61
Grand Total	**194**	**100,00**
Farm-saved S&PM		
Very important	7	6,60
Important	27	25,47
Fairly important	29	27,36
Not/not much important	43	40,57
Grand Total	**106**	**100,00**
Development of new plant breeding technologies		
Very important	17	11,41
Important	34	22,82
Fairly important	49	32,89
Not/not much important	49	32,89
Grand Total	**149**	**100,00**
Diversity of the varieties		
Very important	29	16,38
Important	74	41,81
Fairly important	49	27,68
Not/not much important	25	14,12
Grand Total	**177**	**100,00**
Information to users		
Very important	85	38,99
Important	79	36,24
Fairly important	36	16,51
Not/not much important	18	8,26
Grand Total	**218**	**100,00**
Other		
Very important	27	44,26
Important	29	47,54
Fairly important	3	4,92
Not/not much important	2	3,28
Grand Total	**61**	**100,00**

The 'Other' category refers to the following items:
* Free market: 7 mentions 'very important', 20 mentions 'important'
* Food sovereignty: 6 mentions 'very important'
* Food and feed quality: 1 mention 'important', 3 mentions 'fairly important'
* Enforcement of intellectual property: 3 mentions 'very important' 4 mentions 'important'
* Simplification and harmonisation of rules: 5 mentions ' very important', 1 mention 'important'
* Suitability of varieties for organic farming, local conditions: 3 mention 'very important'
* Producer responsibility, adaptation to climate change, adaptation to local conditions, direct relation with 2000/29/EC, Environmentally and economically suitable farming, gene conservation, identity of varieties, quality use: 1 mention for each item

1.2.2. How should the S&PM *'acquis'* be structured in the future?

	Nbr. of answers	% of answers
Maintain directives		
In favour	150	70,09%
Not in favour	64	29,91%
Grand Total	**214**	**100,00%**
Don't know	*21*	
Not applicable	*2*	
Compile Directives per group of crops		
In favour	105	53,03%
Not in favour	93	46,97%
Grand Total	**198**	**100,00%**
Don't know	*29*	
Not applicable	*6*	
Compile Directives according to the final use of the certified seeds/material an their products		
In favour	13	6,47%
Not in favour	188	93,53%
Grand Total	**201**	**100,00%**
Don't know	*23*	
Not applicable	*8*	
Compile Directives per type of users		
In favour	8	3,85%
Not in favour	200	96,15%
Grand Total	**208**	**100,00%**
Don't know	*17*	
Not applicable	*8*	

	Nbr. of answers	% of answers
Other		
In favour	47	95,92%
Not in favour	2	4,08%
Grand Total	**49**	**100,00%**
Don't know	*2*	
Not applicable	*2*	

The 'Other' category refers to the following items:
* Compilation according to the constitutional provisions of the legislative framework (e.g. variety registration, seed certification etc. with crop specific annexes): 13 mentions 'in favour'
* Introduce a structure (regulations) distinguishing between plant health (quarantine and quality pests and diseases), variety registration (incl. varietal identity) and certification: 5 mentions 'in favour'
* Have a specific catalogue for non protected varieties and peasant/organic farming and acknowledge farmers' rights to exchange their seeds reproduced on farm: 7 mentions 'in favour'
* Compilation of a single directive for the group of crops originating from seed and PM of conservation varieties (fruit PM included) as well as of one basic seed law for all crops: 4 mentions 'in favour'
* Content and proper implementation of the legislation are more important to seed companies and users than the way the respective texts are presented technically: 4 mentions 'in favour'
* Restrict to a limited number of species: 4 mentions 'in favour'
* Maintain directives but make them much less prescriptive and more flexible / specify that they apply to professional users and not non professionals: 2 mentions 'in favour'
* Better integration with requirements for plant health: 2 mentions 'in favour'
* Maintain only the requirements on identity and labelling for ornamentals and leave out the other aspects quality: 2 mentions 'in favour'
* Structure by species; maintain separate seed potato Directive; distinguish between the group of agricultural crops, group of vegetables, group of potatoes, ornamental, fruit, forest, vine; compilation of Directive according to usage (e.g. use in turf): 1 mention 'in favour' for each item

1.2.3. What should be the legal instruments to regulate the marketing of S&PM at EU level in the future?

	Nbr. of answers	% of answers
Community Directives for variety/material registration		
In favour	124	62,63%
Not in favour	74	37,37%
Grand Total	**198**	**100,00%**
Don't know	*20*	
Not applicable	*10*	
Community Directives for certification		
In favour	118	58,42%
Not in favour	84	41,58%
Grand Total	**202**	**100,00%**
Don't know	*15*	
Not applicable	*9*	
Community Regulations for variety/material registration		
In favour	85	44,04%
Not in favour	108	55,96%
Grand Total	**193**	**100,00%**
Don't know	*27*	
Not applicable	*8*	
Community Regulations for certification		
In favour	88	43,35%
Not in favour	115	56,65%
Grand Total	**203**	**100,00%**
Don't know	*20*	
Not applicable	*7*	
Other		
In favour	9	100,00%
Grand Total	**9**	**100,00%**
Don't know	*1*	
Not applicable	*2*	

The 'Other' category refers to the following items:
* Content and proper implementation are most important: 5 mentions 'in favour'
* Regulations for phytosanitary matters: 1 mention 'in favour'
* Annexes of the Directives could be amended by Regulations: 1 mention 'in favour'
* Regulation for marketing of PM: 1 mention 'in favour'

Evaluation of the Community *'acquis'* on the marketing of seed and plant propagating material (S&PM) - Qualitative questionnaire - Survey by the FCEC (Food Chain Evaluation Consortium)

SECTION 2 - VARIETY/MATERIAL REGISTRATION

2.1. DUS TESTING

2.1.1. Lessons from the past

2.1.1.1. Have the Community provisions for DUS testing been effective in ensuring that no new variety has been marketed unless it is distinct, uniform and stable?

	Nbr. of answers	% of the answers
Community provisions for dinstinctness		
Not much effective	5	3,25%
Partly effective	69	44,81%
Fully effective	80	51,95%
Grand Total	**154**	**100,00%**
Don't know	*8*	
Not applicable	*5*	
Community provisions for uniformity		
Not much effective	3	1,96%
Partly effective	57	37,25%
Fully effective	93	60,78%
Grand Total	**153**	**100,00%**
Don't know	*8*	
Not applicable	*4*	
Community provisions for stability		
Not much effective	3	2,00%
Partly effective	61	40,67%
Fully effective	86	57,33%
Grand Total	**150**	**100,00%**
Don't know	*9*	
Not applicable	*5*	

2.1.1.2. Have some DUS requirements limited the marketing of varieties of interest to users?

	Nbr. of answers	% of the answers
Yes	50	35,46%
No	91	64,54%
Grand Total	**141**	**100,00%**
Don't know	*20*	
Not applicable	*4*	

2.1.1.3. To what extent are the costs involved in fulfilling the obligations imposed by the Community provisions for DUS testing reasonable and proportionate?

	Nbr. of answers	% of the answers
Not at all	7	5,38%
Not much	7	5,38%
Partly	83	63,85%
Fully	33	25,38%
Grand Total	**130**	**100,00%**
Don't know	*20*	
Not applicable	*12*	

2.1.1.4. To what extent has the public authority transferred the cost od operating the DUS testing to the industry?

	Nbr. of answers	% of the answers
Not at all	14	10,85%
Not much	7	5,43%
Partly	70	54,26%
Fully	38	29,46%
Grand Total	**129**	**100,00%**
Don't know	*26*	
Not applicable	*10*	

2.1.1.5. To what extent is the current distribution of the costs of operating the DUS testing appropriate?

	Nbr. of answers	% of the answers
Not at all	5	4,31%
Not much	5	4,31%
Partly	40	34,48%
Fully	66	56,90%
Grand Total	**116**	**100,00%**
Don't know	*28*	
Not applicable	*19*	

2.1.2. Suggestions for the future

2.1.2.1. What should be done in the future regarding the Community DUS acceptance criteria, without considering the protection aspects?

	Nbr. of answers	% of the answers
Acceptance criteria for dinstinctness		
Maintain	134	86,45%
Extend	15	9,68%
Reduce	4	2,58%
Remove	2	1,29%
Grand Total	**155**	**100,00%**
Don't know	*6*	
Not applicable	*1*	
Acceptance criteria for uniformity		
Maintain	132	84,62%
Extend	6	3,85%
Reduce	12	7,69%
Remove	6	3,85%
Grand Total	**156**	**100,00%**
Don't know	*6*	
Not applicable	*1*	
Acceptance criteria for stability		
Maintain	128	83,12%
Extend	9	5,84%
Reduce	10	6,49%
Remove	7	4,55%
Grand Total	**154**	**100,00%**
Don't know	*6*	
Not applicable	*1*	

2.1.2.2. What should be done in the future regarding the operational organisation of DUS testing?

	Nbr. of answers	% of the answers
Maintain the current organisation of DUS testing		
In favour	67	47,18%
Not in favour	75	52,82%
Grand Total	**142**	**100,00%**
Don't know	*12*	
Not applicable	*7*	
Organise & coordinate DUS testing at Community level instead of by national or regional authorities		
In favour	48	38,71%
Not in favour	76	61,29%
Grand Total	**124**	**100,00%**
Don't know	*12*	
Not applicable	*4*	
Organise DUS testing at breeders level under official supervision		
In favour	45	36,89%
Not in favour	77	63,11%
Grand Total	**122**	**100,00%**
Don't know	*11*	
Not applicable	*7*	
Extend the bilateral agreementsin order to rationalize the number of DUS testing sites in the EU		
In favour	114	84,44%
Not in favour	21	15,56%
Grand Total	**135**	**100,00%**
Don't know	*14*	
Not applicable	*9*	
Have a same and unique DUS testing for marketing and for the CPVR system		
In favour	108	80,60%
Not in favour	26	19,40%
Grand Total	**134**	**100,00%**
Don't know	*19*	
Not applicable	*6*	
Adapt the standards to the development of new breeding technologies		
In favour	114	91,94%
Not in favour	10	8,06%
Grand Total	**124**	**100,00%**
Don't know	*29*	
Not applicable	*8*	
Other		
In favour	26	100,00%
Grand Total	**26**	**100,00%**
Don't know		
Not applicable		

The 'Other' category refers to the following items:
* DUS report to be used for both listing and PBRs: 10 mentions
* Maintain DUS for PBR and have DUS afterwards when necessary for ornamentals which do not get PBR: 3 mentions

* Organise and coordinate DUS testing at Community level in cooperation with national authorities: 3 mentions
* Coordinate DUS testing underconditions: 1 mention
* DUS testing system should allow farmers associations or Institutes to realize (not only breeders) tests under official supervision. Inform users on breeding methods used (ex. CMS, Mutagenesis): 2 mentions
* Accreditation of 2-3 competent national examination offices close to main markets and breeding of species concerned. Applications to be done at one of these accredited offices: 1 mention.
* PM: Introduce the possibility for breeders/others to introduce new varieties with a proper description that is made official/authorized by registration authorities: 1 mention
* DUS report to be accepted in all MS: 1 mention
* As only DUS testing is performed to list a vegetable variety, an alternative in order to list varieties directly in EU common catalogue could be the PBR managed by CPVO: 1 mention
* Adapted regulations for plant genetic resources: 1 mention
* Use novel technology(for exemple molecular analysis) to improve results and decrease costs: 1 mention
* Abandon all governmental subsidies: 1 mention

2.2. VCU TESTING

2.2.1. Lessons from the past

2.2.1.1. Have the Community provisions for VCU testing been effective in ensuring that any new variety is an improvement on marketed varieties?

	Nbr. of answers	% of the answers
Community provisions for value for cultivation		
Not effective at all	1	0,83%
Not much effective	11	9,17%
Partly effective	62	51,67%
Fully effective	46	38,33%
Grand Total	**120**	**100,00%**
Don't know	*7*	
Not applicable	*8*	
Community provisions for value for use		
Not effective at all	2	1,71%
Not much effective	10	8,55%
Partly effective	59	50,43%
Fully effective	46	39,32%
Grand Total	**117**	**100,00%**
Don't know	*8*	
Not applicable	*8*	

2.2.1.2. Have the Community requirements been sufficient and relevant to bring the same guarantee to the users of each Member States?

	Nbr. of answers	% of the answers
Not at all	9	8,41%
Not much	16	14,95%
Partly	61	57,01%
Fully	21	19,63%
Grand Total	**107**	**100,00%**
Don't know	*15*	
Not applicable	*13*	

2.2.1.3. Have some VCU requirements limited the marketing of varieties of interest to users?

	Nbr. of answers	% of the answers
Yes	32	28,07%
No	82	71,93%
Grand Total	**114**	**100,00%**
Don't know	*13*	
Not applicable	*9*	

2.2.1.4. To what extent are the costs involved in fulfilling the obligations for VCU testing reasonable and proportionate?

	Nbr. of answers	% of the answers
Not at all	4	4,08%
Not much	6	6,12%
Partly	58	59,18%
Fully	30	30,61%
Grand Total	**98**	**100,00%**
Don't know	*20*	
Not applicable	*12*	

2.2.1.5. To what extent has the public authority transferred the cost of VCU testing to the industry?

	Nbr. of answers	% of the answers
Not at all	4	3,74%
Not much	9	8,41%
Partly	66	61,68%
Fully	28	26,17%
Grand Total	**107**	**100,00%**
Don't know	*15*	
Not applicable	*13*	

2.2.1.6. To what extent is the current distribution of the costs of operating the VCU testing appropriate?

	Nbr. of answers	% of the answers
Not much	7	7,45%
Partly	47	50,00%
Fully	40	42,55%
Grand Total	**94**	**100,00%**
Don't know	*20*	
Not applicable	*22*	

2.2.2. Suggestions for the future

2.2.2.1. What should be done in the future regarding the Community VCU provisions?

	Nbr. of answers	% of the answers
Remove the VCU provisions from the EU legislation		
In favour	14	11,86%
Not in favour	104	88,14%
Grand Total	**118**	**100,00%**
Don't know	*7*	
Not applicable	*11*	

	Nbr. of answers	% of the answers
Reduce the Community VCU provisions		
In favour	26	23,85%
Not in favour	83	76,15%
Grand Total	**109**	**100,00%**
Don't know	*16*	
Not applicable	*9*	
Maintain the Community VCU provisions as they currently stand		
In favour	83	72,17%
Not in favour	32	27,83%
Grand Total	**115**	**100,00%**
Don't know	*10*	
Not applicable	*7*	
Maintain the Community VCU provisions for a reduced number of crops/species		
In favour	23	21,50%
Not in favour	84	78,50%
Grand Total	**107**	**100,00%**
Don't know	*12*	
Not applicable	*14*	
Maintain the Community VCU provisions for a limited number of final uses		
In favour	16	14,29%
Not in favour	96	85,71%
Grand Total	**112**	**100,00%**
Don't know	*10*	
Not applicable	*10*	
Maintain the Community VCU provisions for a limited number of users		
In favour	5	4,63%
Not in favour	103	95,37%
Grand Total	**108**	**100,00%**
Don't know	*15*	
Not applicable	*8*	
Enlarge the Community VCU provisions to criteria such as food & environmental safety aspects		
In favour	46	42,59%
Not in favour	62	57,41%
Grand Total	**108**	**100,00%**
Don't know	*15*	
Not applicable	*8*	
Reinforce the Community VCU provisions		
In favour	34	31,48%
Not in favour	74	68,52%
Grand Total	**108**	**100,00%**
Don't know	*14*	
Not applicable	*10*	
Other		
In favour	5	100,00%
Grand Total	**5**	**100,00%**
Don't know		
Not applicable	*3*	

The 'Other' category refers to the following items:
* Enlarge the Community VCU provisions to criteria such as food and feed quality and environmental aspects (2 mentions)
* More regional VCU, the results of which act as recommendation (no discriminatory results) (1 mention)
* Adapt the VCU system to the diverse farming systems and make it not mandatory (1 mention)
* Remaining mention: not clearly specified

2.2.2.4. What should be done in the future regarding the operational organisation of VCU testing?

	Nbr. of answers	% of the answers
Organise the official VCU testing at Community level, based on areas of adaptation		
In favour	42	35,90%
Not in favour	75	64,10%
Grand Total	**117**	**100,00%**
Don't know	*6*	
Not applicable	*8*	
Organise the VCU testing at the level of the breeders, under official supervision		
In favour	79	66,95%
Not in favour	39	33,05%
Grand Total	**118**	**100,00%**
Don't know	*6*	
Not applicable	*9*	
Stimulate the VCU testing at the level of the breeders without official control or supervision		
In favour	7	5,83%
Not in favour	113	94,17%
Grand Total	**120**	**100,00%**
Don't know	*4*	
Not applicable	*9*	
Allow recognition of other MS VCU data for national listing		
In favour	90	76,92%
Not in favour	27	23,08%
Grand Total	**117**	**100,00%**
Don't know	*7*	
Not applicable	*8*	
Allow coordination between MS		
In favour	98	84,48%
Not in favour	18	15,52%
Grand Total	**116**	**100,00%**
Don't know	*9*	
Not applicable	*8*	
Other		
In favour	18	100,00%
Grand Total	**18**	**100,00%**
Don't know	*1*	
Not applicable	*1*	

The 'Other' category refers to the following items:
* Consider multilateral agreements in addition to bilateral ones (9 mentions)
* Make VCU not obligatory (2 mentions)
* Organise national official VCU testing for national decision with coordinated trial network, in order to be able to treat data, after registration, by agroclimatic areas for certain species (2 mentions)
* Organise VCU testing together with the breeders (1 mention); organise partly the VCU testing at the level of the breeders (e.g. one year of tests with common standards) (1 mention); allow farmers associations or institutes to realise tests under official supervision (1 mention).
* Remaining two mentions: not clearly specified

2.3. VARIETY DENOMINATION

2.3.1. Lessons from the past

2.3.1.1. Have the Community provisions for the variety denomination been effective in ensuring that varieties are designated in all MS by the same variety denomination?

	Nbr. of answers	% of the answers
Not much	2	1,45%
Partly	63	45,65%
Fully	73	52,90%
Grand Total	**138**	**100,00%**
Don't know	*12*	
Not applicable	*9*	

2.3.1.2. Have some variety denomination requirements limited the marketing of varieties of interest to users?

	Nbr. of answers	% of the answers
Yes	24	19,35%
No	100	80,65%
Grand Total	**124**	**100,00%**
Don't know	*26*	
Not applicable	*10*	

2.3.1.3. Does the time required for validation of a variety denomination by the official bodies negatively impact on the marketing of S&PM?

	Nbr. of answers	% of the answers
Not at all	26	20,80%
Not much	42	33,60%
Partly	57	45,60%
Grand Total	**125**	**100,00%**
Don't know	*22*	
Not applicable	*9*	

2.3.2. Suggestions for the future

2.3.2.1. Is the current system of variety denomination sustainable in the future?

	Nbr. of answers	% of the answers
Yes	62	49,21%
No	64	50,79%
Grand Total	**126**	**100,00%**
Don't know	*31*	
Not applicable	*6*	

2.3.2.2. What should be done in the future regarding the variety denomination

	Nbr. of answers	% of the answers
Maintain the variety denomination as it currently stands		
In favour	88	62,86%
Not in favour	52	37,14%
Grand Total	**140**	**100,00%**
Don't know	*14*	
Not applicable	*7*	
Revise the system of variety denomination		
In favour	44	35,20%
Not in favour	81	64,80%
Grand Total	**125**	**100,00%**
Don't know	*17*	
Not applicable	*12*	
Remove the variety denomination regulation		
In favour	1	0,74%
Not in favour	135	99,26%
Grand Total	**136**	**100,00%**
Don't know	*16*	
Not applicable	*6*	
Other		
In favour	36	100,00%
Grand Total	**36**	**100,00%**
Don't know	*1*	
Not applicable	*3*	

The 'Other' category refers to the following items:
* Be much stricter in the grant of a variety denomination for mutants of fruit plant PM (1 mention)
* Central database for variety denominations and a central testing of new denominations (26 mentions)
* As regards ornamentals, improve harmony between denominations and the rules of the ICNCP and registers of cultivar names compiled by ICRAs (1 mention)
* Possibility of using codes as variety denominations for all crops and all varieties (4 mentions)
* Set clear conditions regarding variety denomination in connection to official registration (on voluntary or other basis) of varieties of species covered by Dir. 92/34 and 98/56 (1 mention)
* Improve the rules to ensure maximum freedom to the applicant to chose any form of denomination they see fit for their variety (2 mentions)

2.4. COMMON CATALOGUES

2.4.1. Lessons from the past

2.4.1.1. Does your organisation use the common catalogues?

	Nbr. of answers	% of the answers
Yes	128	87,07%
No	19	12,93%
Grand Total	**147**	**100,00%**
Don't know		
Not applicable	*13*	
How frequently are they used?		
Occasionally	30	23,44%
Regularly	63	49,22%
Very often	35	27,34%
Grand Total	**128**	**100,00%**
Don't know	*1*	
Not applicable	*6*	
At which level?		
All staff	72	56,25%
Headquarters only	40	31,25%
Other level	16	12,50%
Grand Total	**128**	**100,00%**
Don't know		
Not applicable	*6*	

The 'Other' category refers to the following items:
* Depending on responsibilities and special assignments: 4 mentions
* Members: 4 mentions
* Designated personnel (policy making and decision taking staff): 2 mentions

* Authority; researchers; senior staff; seed certification office; variety denomination department and for some
* specific cases the technical experts: 1 mention each
* 2 mentions not specified

2.4.1.2. Does the lapse of time required between the national registration and the publication in the common catalogues negatively impact on the marketing of S&PM?

	Nbr. of answers	% of the answers
Not at all	20	16,67%
Not much	35	29,17%
Partly	60	50,00%
Fully	5	4,17%
Grand Total	**120**	**100,00%**
Don't know	*24*	
Not applicable	*9*	

2.4.2. Suggestions for the future

2.4.2.1. What should be done in the future regarding the national and common catalogues?

Maintain both the national and common catalogues as they currently stand

	Nbr. of answers	% of the answers
In favour	122	83,56%
Not in favour	24	16,44%
Grand Total	**146**	**100,00%**
Don't know	*4*	
Not applicable	*7*	

Stop national catalogues and only work with common catalogues

In favour	16	11,11%
Not in favour	128	88,89%
Grand Total	**144**	**100,00%**
Don't know	*5*	
Not applicable	*5*	

Work with common catalogues and allow MS ta have national catalogues on a voluntary basis

In favour	41	31,06%
Not in favour	91	68,94%
Grand Total	**132**	**100,00%**
Don't know	*14*	
Not applicable	*5*	

Other

In favour	38	97,44%
Not in favour	1	2,56%
Grand Total	**39**	**100,00%**
Don't know		
Not applicable	*2*	

The 'Other' category refers to the following items:
* EU Common Catalogue, that is a simple automatic / electronic / on the internet compilation of national catalogues, with simultaneous inclusion of varieties of national listings in the CC: 30 mentions
* Common catalogue / common list for fruit plants: 4 mentions
* Immediate insertion in the common catalogue of new varieties instead of adding first to national lists: 2 mentions
* Work with national catalogue; No common catalogue, leave this to the private sector and self control by the customers (the farmers): 1 mention for each
* Necessity of national catalogues (gene conservation purposes): 1 mention 'not in favour'

2.4.2.4. If you are in favour of maintaining the common catalogues, is it desirable to modify them in terms of their accessibility, user-friendliness, number of updates, and elements of information they contain?

	Nbr. of answers	% of the answers
Accessibility		
Yes	102	79,69%
No	26	20,31%
Grand Total	**128**	**100,00%**
Don't know	*12*	
Not applicable	*5*	

	Nbr. of answers	% of the answers
User-friendliness		
Yes	114	87,02%
No	17	12,98%
Grand Total	**131**	**100,00%**
Don't know	*10*	
Not applicable	*5*	

Number of updates		
Same	34	27,20%
More	90	72,00%
Less	1	0,80%
Grand Total	**125**	**100,00%**
Don't know	*15*	
Not applicable	*6*	

Elements of technical information they contain		
Same	54	44,63%
More	63	52,07%
Less	4	3,31%
Grand Total	**121**	**100,00%**
Don't know	*18*	
Not applicable	*11*	

SECTION 3 - CERTIFICATION

3.1. LESSONS FROM THE PAST

3.1.1. Have the Community provisions for the certification of S&PM been effective in ensuring S&PM lots of sufficient quality?

	Nbr. of answers	% of the answers
Not at all	2	1,20%
Not much	3	1,80%
Partly	49	29,34%
Fully	113	67,66%
Grand Total	**167**	**100,00%**
Don't know	*6*	
Not applicable	*13*	

3.1.2. Have the Community provisions for the certification of S&PM been effective in facilitating the free marketing of S&PM in the EU?

	Nbr. of answers	% of the answers
Not at all	3	1,82%
Not much	5	3,03%
Partly	27	16,36%
Fully	130	78,79%
Grand Total	**165**	**100,00%**
Don't know	*12*	
Not applicable	*11*	

3.1.3. Are the current quality standards relevant for the purpose of certification?

	Nbr. of answers	% of the answers
Identity		
Not much relevant	2	1,20%
Partly relevant	11	6,59%
Fully relevant	154	92,22%
Grand Total	**167**	**100,00%**
Don't know	*2*	
Not applicable	*18*	
Varietal purity		
Not much relevant	3	1,85%
Partly relevant	27	16,67%
Fully relevant	132	81,48%
Grand Total	**162**	**100,00%**
Don't know	*1*	
Not applicable	*23*	
Germination		
Not relevant at all	2	1,41%
Not much relevant	11	7,75%
Partly relevant	15	10,56%
Fully relevant	114	80,28%
Grand Total	**142**	**100,00%**
Don't know	*1*	
Not applicable	*41*	
Health		
Not much relevant	12	7,19%
Partly relevant	34	20,36%
Fully relevant	121	72,46%
Grand Total	**167**	**100,00%**
Don't know	*1*	
Not applicable	*20*	
Other		
Not relevant at all	3	9,38%
Not much relevant	3	9,38%
Partly relevant	5	15,63%
Fully relevant	21	65,63%
Grand Total	**32**	**100,00%**
Don't know	*2*	
Not applicable	*1*	

The 'Other' category refers to the following items:
* Analytical/specific/technical purity: 7 mentions 'Fully relevant', 1 mention 'Partly relevant', 1 mention 'Not relevant al all'
* Identification of species for certification of commercial seed in forage crops: 9 mentions 'Fully relevant'
* Other seed presence: 3 mentions 'fully relevant', 1 mention 'Not relevant at all'
* Moisture: 2 mentions 'fully relevant', 2 mentions 'not relevant at all'
* Avena fatua O tolerance: 1 mention 'fully relevant'
* Weight of 1000 seeds: 1 mention 'fully relevant' and 1 mention 'not relevant at all'
* Tuber defects/size: 1 mention 'not much relevant'
* Plant virus: 1 mention 'partly relevant'
* Weed species purity: 1 mention 'partly relevant'

3.1.4. To what extent are the costs involved in fulfilling the obligations imposed by the Community provisions for certification reasonable and proportionate?

	Nbr. of answers	% of the answers
Not at all	2	1,44%
Not much	3	2,16%
Partly	49	35,25%
Fully	85	61,15%
Grand Total	**139**	**100,00%**
Don't know	*28*	
Not applicable	*18*	

3.1.5. To what extent is the current distribution (between industry and public authorities) of the costs of operating certification appropriate?

	Nbr. of answers	% of the answers
Not at all	2	1,47%
Not much	6	4,41%
Partly	39	28,68%
Fully	89	65,44%
Grand Total	**136**	**100,00%**
Don't know	*30*	
Not applicable	*18*	

3.1.6. Did the organisation of certification in your country move from an official system (official examination) to a system of certification under official supervision?

	Nbr. of answers	% of the answers
Yes	81	51,92%
No	75	48,08%
Grand Total	**156**	**100,00%**
Don't know	*5*	
Not applicable	*25*	

3.1.7. Are the EC standards for the certification of S&PM coherent with OECD standards?

	Nbr. of answers	% of the answers
Partly	48	43,64%
Fully	62	56,36%
Grand Total	**110**	**100,00%**
Don't know	*27*	
Not applicable	*47*	

3.1.8. Are the EC standards for the certification of S&PM coherent with UN-ECE standards?

	Nbr. of answers	% of the answers
Not much	2	2,94%
Partly	45	66,18%
Fully	21	30,88%
Grand Total	**68**	**100,00%**
Don't know	*37*	
Not applicable	*73*	

3.1.9. Are Community comparative trials an appropriate tool for ensuring harmonization of inspection practices contributing to S&PM lots of sufficient quality?

	Nbr. of answers	% of the answers
Not at all	2	1,39%
Not much	18	12,50%
Partly	26	18,06%
Fully	98	68,06%
Grand Total	**144**	**100,00%**
Don't know	*19*	
Not applicable	*23*	

3.2.1. What should be done in the future regarding certification?

	Nbr. of answers	% of the answers
Maintain the certification standards as they currently stand		
In favour	129	74,14%
Not in favour	45	25,86%
Grand Total	**174**	**100,00%**
Don't know	*4*	
Not applicable	*4*	
Maintain the certification structures as they currently stand		
In favour	126	74,12%
Not in favour	44	25,88%
Grand Total	**170**	**100,00%**
Don't know	*7*	
Not applicable	*3*	
Decrease the number of species covered by the Seed Marketing Directives		
In favour	39	32,23%
Not in favour	82	67,77%
Grand Total	**121**	**100,00%**
Don't know	*7*	
Not applicable	*46*	

	Nbr. of answers	% of the answers
Increase the number of species covered by the Seed Marketing Directives		
In favour	56	48,28%
Not in favour	60	51,72%
Grand Total	**116**	**100,00%**
Don't know	*11*	
Not applicable	*48*	
Decrease the number of standards		
In favour	23	18,85%
Not in favour	99	81,15%
Grand Total	**122**	**100,00%**
Don't know	*15*	
Not applicable	*34*	
Increase the number of standards		
In favour	33	27,50%
Not in favour	87	72,50%
Grand Total	**120**	**100,00%**
Don't know	*16*	
Not applicable	*34*	
Revise the levels set in the quality standards (e.g. germination %)		
In favour	72	51,06%
Not in favour	69	48,94%
Grand Total	**141**	**100,00%**
Don't know	*5*	
Not applicable	*28*	
Extend the field inspection "under official supervision" to pre-basic and basic crops		
In favour	77	63,64%
Not in favour	44	36,36%
Grand Total	**121**	**100,00%**
Don't know		
Not applicable	*13*	
In the case of certification "under official supervision", revise the minimum 5% check testing, check inspection and check sampling		
In favour	38	34,86%
Not in favour	71	65,14%
Grand Total	**109**	**100,00%**
Don't know	*18*	
Not applicable	*47*	
In the case of certification "under official supervision", leave the level of check testing, check inspection and check samples to Member States' discretion, based on their own assessment of the risk to seed quality		
In favour	55	49,55%
Not in favour	56	50,45%
Grand Total	**111**	**100,00%**
Don't know		
Not applicable	*16*	
In the case of certification "under official supervision", target inspection on the basis of risk (taking into consideration the higher voluntary standards in place, industry inspections, track records, etc.)		
In favour	66	60,00%
Not in favour	44	40,00%
Grand Total	**110**	**100,00%**
Don't know	*17*	
Not applicable	*45*	
Apply controls/certification standards to final generation S&PM only and leave companies to decide how to manage parental generation S&PM production to meet the quality standards of final generation certified lots of the category under which the S&PM is marketed		
In favour	28	20,90%
Not in favour	106	79,10%
Grand Total	**134**	**100,00%**
Don't know	*7*	
Not applicable	*30*	
Apply controls/certification standards to parental generations only and leave companies to decide how to manage commercial S&PM production to meet the quality standards of final generation certified lots of the category under which the S&PM is marketed		
In favour	11	8,21%
Not in favour	123	91,79%
Grand Total	**134**	**100,00%**
Don't know	*9*	
Not applicable	*30*	
Other		
In favour	13	100,00%
Grand Total	**13**	**100,00%**
Don't know	*1*	
Not applicable	*7*	

Revise requirements: the 'Other' category refers to the following items:
* Harmonizing and simplifying the rules in the seed marketing Directives concerning marketing and labelling of "Small Packages": 8 mentions
* Simplification of the Annexes of the Seed Directives: 1 mention
* Exceptions for plant genetic resources: 1 mention
* More control at the user's level: 1 mention
* Explore the opportunities and demand for more radical options: 1 mention
* Regular review of existing standards may include some increases/decreases in standards: 1 mention

	Nbr. of answers	% of the answers
Integrate the inspection regimes for certification and for plant health		
In favour	126	84,00%
Not in favour	24	16,00%
Grand Total	**150**	**100,00%**
Don't know		
Not applicable	*1*	
Set up a certification with a system of an accreditated third party private body approved by the Member State		
In favour	69	50,74%
Not in favour	67	49,26%
Grand Total	**136**	**100,00%**
Don't know	*3*	
Not applicable	*2*	
Set up a certification with a system of S&PM company accreditation		
In favour	52	35,86%
Not in favour	93	64,14%
Grand Total	**145**	**100,00%**
Don't know	*15*	
Not applicable	*14*	
Limit the official certification scheme to a basic level defined in the legislation and have extra quality requirements left up to private companies		
In favour	59	42,14%
Not in favour	81	57,86%
Grand Total	**140**	**100,00%**
Don't know	*2*	
Not applicable	*3*	
Set up a voluntary certification scheme to national, or international (i.e. OCDE) standards		
In favour	16	11,35%
Not in favour	125	88,65%
Grand Total	**141**	**100,00%**
Don't know	*1*	
Not applicable	*5*	
Remove the official certification system and pass on the full producer's liability		
In favour	9	5,88%
Not in favour	144	94,12%
Grand Total	**153**	**100,00%**
Don't know	*7*	
Not applicable	*14*	
Other		
In favour	4	80,00%
Not in favour	1	20,00%
Grand Total	**5**	**100,00%**
Don't know	*2*	
Not applicable	*8*	

Revise the operational organisation: the 'Other' category refers to the following items:
* Maintain official supervision by an unique official body per MS and delegate production control process (field, plant, lab) to companies under their habilitated quality process: 3 mentions
* Moving some species to other group of certification: 1 mention
* 1 mention 'not in favour': not specified

SECTION 4 - ROLE OF THE CPVO

4.1. What should be the role of the CPVO in the future, in addition to considering applications for protection of variety rights?

	Nbr. of answers	% of the answers
Active role in variety denomination		
In favour	124	86,71%
Not in favour	19	13,29%
Grand Total	**143**	**100,00%**
Don't know	*1*	
Not applicable	*3*	
Active role in VCU testing		
In favour	6	5,26%
Not in favour	108	94,74%
Grand Total	**114**	**100,00%**
Don't know	*7*	
Not applicable	*25*	

	Nbr. of answers	% of the answers
Active role in DUS testing for variety listing		
In favour	86	66,15%
Not in favour	44	33,85%
Grand Total	**130**	**100,00%**
Don't know	*10*	
Not applicable	*7*	
Active role in the administrative management of the Common Catalogue and national listing		
In favour	90	67,16%
Not in favour	44	32,84%
Grand Total	**134**	**100,00%**
Don't know	*6*	
Not applicable	*7*	
Active role for management of comparative trials		
In favour	38	29,69%
Not in favour	90	70,31%
Grand Total	**128**	**100,00%**
Don't know	*13*	
Not applicable	*5*	
Active role for management of tasks to equivalence with third countries		
In favour	40	31,01%
Not in favour	89	68,99%
Grand Total	**129**	**100,00%**
Don't know	*12*	
Not applicable	*6*	
Active role in the administrative management of conservation varieties		
In favour	60	44,12%
Not in favour	76	55,88%
Grand Total	**136**	**100,00%**
Don't know	*7*	
Not applicable	*6*	
Other		
Don't know	1	4,55%
In favour	21	95,45%
Grand Total	**22**	**100,00%**
Don't know		
Not applicable	*1*	

The 'Other' category refers to the following items:
* Accreditation, coordination and evaluation of the Examination Offices and assurance of harmonized DUS-testing: 8 mentions
* Active coordination / cooperation in the fields of plant breeders right, trademarks and variety registration while building better working relationships with ICRAs: 5 mentions
* Hosting of a database on approved /selected /registered stands of forestry species/crops: 1 mention
* Active role in the administrative management of the Common Catalogue: 4 mentions
* FRM: Trials management to promote provenances and genetical imrprovements between Members Countries: 1 mention
* 2 mentions: not specified

Annex 5 – List of specific recommendations

5. BACKGROUND INFORMATION

5.1. INTERVENTION LOGIC (PAST)

5.2. HISTORY OF THE DEVELOPMENT OF THE S&PM LEGISLATION

5.2.1. Origin
5.2.2. Number and evolution of legislative texts
5.2.3. Exemptions of application in the MS & authorisations for more strict provisions

5.3. CONTEXT INTO WHICH THE S&PM LEGISLATION OPERATES

5.3.1. Description of the seed sector in the EU
5.3.2. Challenges for the future

Higher grain prices impacts on the seed sector have to be monitored and taken into consideration in any impact assessment to be developed prior to any regulation change to the Community legislation.

5.3.3. Farmers' approach to varietal choice in agricultural crops

5.4. OVERALL CONCLUSIONS

6. THE 12 DIRECTIVES OF THE S&PM LEGISLATION

6.1. DESCRIPTION OF THE DIRECTIVES

6.1.1. Organisational structure
6.1.2. Scope of the S&PM legislation

FCEC team considers that it is necessary to review the terms and scope of the exemption regarding *'industrial use'* to bring more clarity on the implementation of such provision, if still relevant for the future.

6.1.3. Perimeter of the S&PM legislation

Since there has been considerable change in the relative economic importance of crop species over time, most of stakeholders and interviewees consider it appropriate to review the lists of species covered by the Directives.

As concluded at the working party, there is a need for regulatory clarification in the future concerning marketing of FRM which is clearly considered not to be fit for '*forestry purposes'* or is clearly not intended to be marketed or planted for long term forestry purposes.

6.1.4. Consistency between the provisions of the Directives

FCEC team considers that harmonization should be sought for legal provisions across regulatory texts, but when talking about technical elements e.g. term and definitions, harmonization is not fully required and should be considered on a case by case basis and on a sector by sector basis.

There seems to be therefore a valid case for further alignment of the various provisions of the EU S&PM legislation, both internally (i.e. between the seed/PM Directives), and externally with the overall EU GMO and novel foods legislative framework.

Again, there seems to be therefore a valid case for further alignment and updating of the various provisions of the EU S&PM legislation, both internally (i.e. between the Seeds/PM Directives), and externally with the current relevant horizontal plant health legislation (Directive 2000/29/EC).

6.2. CONSISTENCY OF THE S&PM LEGISLATION WITH OTHER EC POLICY INTERVENTIONS

6.2.1. Plant Variety Rights

6.2.2. Human Health (i.e. EU legislation on contaminants in food)

As highlighted during the interviews, increasing the consistency between the Community S&PM *'acquis'* and the legislation for the reduction of mycotoxins would imply to attack the problem at the source and to examine the variety resistance to non-pathogen diseases contributing to the production of mycotoxins. This would require to define examination criteria, minimum resistance levels as well as testing methods, what nevertheless seems quite difficult to do from a scientific point of view.

In conclusion, these two simple examples may demonstrate the value to consider plant breeding as one component of public health strategy and the potential for integrating such kind of criteria during the examination of varieties for acceptance as marketable S&PM. To answer to the question if there is a need to use seed legislation for driving plant breeding efforts as a tool in food safety, public health strategies and environmental protection, a deeper analysis is required.
Plant breeding future is oriented toward qualitative demand of the consumers for better food and improved nutritional composition of food products that could benefit from plant breeding.

6.2.3. Plant Health

In conclusion, these inconsistencies should be tackled as a much better consistency could be achieved quite easily on topics such as registration, definitions, documents. One MS authority proposes to transfer quarantine disease from seed marketing Directives to plant health Directive to avoid duplication.

As the plant health regulatory framework is planned to be evaluated in early 2009, it is recommended to share this analysis with the SANCO officers in charge of that sector.

From an organisational point of view, it seems that there is room for better integration of the phytosanitary inspection with the inspection for the purpose of certification. This point is further evaluated at section 7.2.11.

6.2.4. Plant Protection Products (PPP)

Inconsistency exists between the Community S&PM legislation and the PPP Directive in what concerns the marketing of treated S&PM, as seeds accepted for marketing within the entire Community must be registered in each MS to which it is intended in what concerns the products used for seed treatment. Further consistency would be searched for in the future.

A new proposal for a Regulation on pesticides that should be adopted by the European Parliament and the Council next year, is considering this issue and includes provisions to guarantee the free circulation of treated seed.

These proposals on the Thematic Strategy on Sustainable Use of Pesticides are under discussion, but a clear monitoring on the outcome of this proposal to identify possible inconsistencies with S&PM legislation (e.g. requirement to establish a non treated pesticides buffer zone to water point that may lead to difficulties to farmers for seeding within these buffer zones when using treated seed).

6.2.5. GMO's

In conclusion, whereas no Community legislation exists on the issue of coexistence, the MS have developed their own regulation on this matter, what has lead to differences between MS and potential problems of definition of responsibility in case of contamination. Majority of stakeholders consulted during the survey ask for harmonised legislation as well as the definition of a minimum threshold for adventitious presence.

6.2.6. Trade policy

6.3. IMPLEMENTATION OF THE S&PM LEGISLATION IN THE MS

6.3.1. Simplicity of the S&PM Directives
6.3.2. Ease of implementation of the S&PM Directives
6.3.3. Utility of the S&PM Directives
6.3.4. Effectiveness in achieving the free marketing of S&PM in the EU
6.3.5. Efficiency in achieving the free marketing of S&PM in the EU
6.3.6. Results of the in-depth study in new Member State(s)

6.4. GOVERNANCE OF THE S&PM LEGISLATION

Only several interviewees consider that DG SANCO is the appropriate DG for governing the legislation, mainly because S&PM are the first element of the Food Chain. S&PM is core segment of crop production, and therefore Community legislation should be managed by DG AGRI, as it was in the past. FCEC considers that grouping all elements of the Food Chain under the same DG (SANCO) allows to get an integrated, complete and much more structured approach.

6.5. OVERALL CONCLUSIONS

7. ANALYSIS OF THE PAST/CURRENT PERFORMANCE OF THE S&PM LEGISLATION

7.1. VARIETY/MATERIAL REGISTRATION

7.1.1. Introduction
7.1.2. Variety registration costs (seed sector only)
7.1.3. DUS
7.1.4. VCU

The FCEC team believes it would be worth making a further analysis of the utility and efficiency of the VCU on a crop-by-crop basis and to better understand why VCU is so important in agriculture crops and not needed for vegetable crops (e.g. logic of keeping VCU for industry chicory and not having VCU for industrial vegetable crops).

7.1.5. Variety denomination

- The fact that the denomination and varieties are registered at the same time prevent the re-use of a nice name given to a variety that will never come to the market. It would be better to promote a system where names and varieties are registered separately and combined only at the end of the cycle (as already done e.g. in France);
- As regards ornamental plants, the lack of harmonisation in the interpretation of variety denomination rules between the PBR authorities and the International Cultivar Registration Authorities (ICRA) is causing problems. One cultivar (variety) should have one name (denomination) for proper marketing and for ensuring clarity so that the end consumer does not get confused. It would be appropriate in the future to officially recognise the scheme developed by the ICRA, which list and describe cultivar on a world base.

7.1.6. Common Catalogues

- Develop a database system for the management and an easier use (selection on the basis of origins or defined parameters), increased transparency, permanent updates and lower management costs;
- Allow for electronic publication of the variety in the OJEC and recognize it as valid to authorize its marketing in the Community.

The most important improvement would lie in reducing the lapse of time for inclusion in the CC. The delay that has been mentioned by most of interviewees is due to the requirement to have variety lists published on the OJEC as mentioned in the Art. 17 of Council Directives 2002/53/EC and 2002/55/EC.

FCEC considers that it would be valuable to evaluate the legal need of this provision. If publication on the OJEC is not compulsory, the inclusion on the CC of a new variety will be effective at notification by the MS.

- variety maintenance: Costs depend on the techniques used to establish and preserve trueness to type. It is proposed to provide the legal room for development/use of additional supportive tools (after careful evaluation) where this leads to more efficiency and cost-reduction. The use of modern techniques should only be possible where these tools have been proven to be suitable for the species concerned and if they facilitate the verification of variety identity at lower costs. It is not proposed to replace phenotypical evaluations by DNA-testing;

7.2. CERTIFICATION

7.2.1. Introduction7.2.2. Certification costs (seed sector only)
7.2.3. Utility

Several respondents provide additional suggestions (Q 3.1.3. and 3.2.1.) as regards the standards for Seed and FRM in the future as follows:

Table 29 – Suggestions for future standards for Seed and FRM

Group of species	Standard	Suggestions
FRM	Overall	- Redefine or clarify some definitions like autochtonous, indigenous, origin etc.
	Health	- Establish more provisions
	Varietal purity	- Reconsider the relevance of the % of different species allowed in the forest seed lot by taking into account that several natural hybrids exist, for example in oak species, which could be accepted or could even be considered as beneficial for planting in certain end-sites; - In particular, variety purity is a problem for *Qercus spp*., especially *Quercus robur* and *Quercus petraea*
	Germination	- Specify the length of time seed germination reports for forestry seeds are valid
Seed	Overall	- Better harmonize the standards between MS; - Revise terms of 'lowest possible level' and 'sufficient quality'
	Identity	- More specifically define the term 'Identity'
	Health	- Establish consistency between plant health standards and marketing Directives. Currently there is a lack of quality standards for important seed-borne pathogens. For instance, non rules for *Claviceps purpurea* in fodder seed Directive, no rules for Powdery scab; - As regards seed potatoes, most of the standards concerning viruses and black leg in Annexe I of the Directive 2002/56/EC are too low to avoid the extension of those parasites in the areas of production: For example, the standard of 4 % of plants presenting symptoms of severe and mild virus in the direct progeny of Basic seeds. Most of the EU countries have introduced stricter standards in their own certification regulation concerning those two parasites, which give less credibility to the EU Directive.
	Health standards for potatoes seed	- Establish an effective mechanism for reviewing and proposing amendments or additions to quality standards, particularly those of current UNECE Standard, with particular emphasis on the removal of the maximum variation in size band, marketing of Pre-basic seed potatoes and inclusion of tolerance for black scurf. Such a mechanism should be more responsive to the needs of a changing seed potato industry; - Consider the possibility of removing the Standards for Tuber defects and rules for tuber size which have no direct link with the quality. The same applies to e.g. scab standards which are a cosmetic rather than quality determining aspect;
	Varietal purity	- More clearly define varietal purity for allogamous crops; - Review varietal purity for tritical, which is not sufficient; - Increase the purity % for weat and barley
	Germination	Introduce a simple and effective method for reducing the minimum germination requirements when necessary in order to reduce the administrative burden of the current derogation arrangements; - Consider the possibility of removing official levels for germination in the (EU) legislation and replace them by 'true labelling', i.e. the seed suppliers must inform the users about the germination capacity of the seed according to a defined standardized methodology on the label; - Revise germination standards to set basic minimum for each crop species and make it mandatory to quote the actual germination level as tested by an official seed testing laboratory; - The high level of the germination norm (92%) for flaxseed is a key point for the producer and must be maintained. It is a major condition for the success of the crop; - Lower the germination standard for Sorghum; - Increase germination levels for professional use of vegetable seed; - Increase the germination level for wheat and barley; - Adapt the norm of durum wheat germination to agroclimatic production conditions;

		- Revise the germination standard for maize seed (higher requirement).
	Weed	- Review some standards for weed seeds (e.g. remove not dangerous weeds) to make them more relevant to current conditions;
	Moisture	- Consider the possibility of removing the official EU provisions for seed moisture standard which seems difficult to harmonize and changing with time (time or climate).

7.2.4. Coherence with OECD and UN-ECE standards

7.2.5. Effectiveness in achieving the objectives of certification

- Variability of requirements concerning the marketing and labelling of 'small packages'. The provisions in Council Directive 66/401/EEC on the marketing of fodder seeds are perceived as very complicated and therefore impede the marketing of these small packages (Art. 2F). In addition to their complexness, the respective rules for the marketing of small packages partly allow individual variations in the different number states, creating some market distorsion. Harmonisation is required in this area;

7.2.6. Efficiency in achieving the objectives

7.2.7. Quality of seed lots imported under the equivalence regime with 3rd countries

7.2.8. Utility of the comparative tests and trials

Most of respondents consider that comparative tests and trials are an important tool and should be fully re-established in the future. Some of them also make suggestions for improvement, as follows:

- Community trials could move to more methodological trials with the aim of European harmonization;
- To reach the same objective, other tools also could be suitable e.g. organizing of meetings in member states for inspectors with discussions on special items and visits to trials and breeding companies or growers;
- Material for the trials should be randomly collected by independent authorities. In the past, they were collected by the official authorities and did not necessarily reflect the quality of the marketed material;
- That tool could be more relevant if the methodology and if the results of exploitation were improved. In case of non comformity, the member states should implement corrective measures. Maybe a system of penalties/sanctions could be implemented to oblige the member states to implement corrective measures;
- More communication should be done to policy-makers and the public in general;
- They are helpful but very expensive and need to be tightly focussed on specific issues.

Finally, some stakeholders of the forest sector regret not to have comparative tests and trials and believe it would be highly valuable to organize such tests in forestry.

7.2.9. Conclusions and recommendations

Regarding the idea of 'setting up a certification with a system of an accredited third party body approved by the MS', answers are balanced too (around 50% in favour and 50% not in favour). This last idea should be further examined and explained as it seems that the principles and the potential benefits of this approach are not sufficiently known.

An extra proposal was presented by the association of users which consists of using the certification platform to control comformity of seed products to other requirements, and especially the GM quality

requirements. Discussing this idea with suppliers representatives and some national authorities led to the conclusions that the conditions should be further discussed and feasibility analysed.

7.2.10. Results of the in-depth studies "Analysis for 1 crop of the extension of the certification activities carried out under official supervision; "Analysis of the possible advantages of a private third party body set-up for supervision"

7.2.11. Results of the in-depth study "Analysis of the interest to connect and to bring together the seed phytosanitary requirements with the certification legislation for plant health"

This integration of regulatory provisions (certification and plant health) will promote integration of services, and FCEC teams considers that a pre-feasibility should be carried-out prior to the evaluation of the plant health *'acquis'* in order to integrate results in that evaluation, if the Commission whishes to go that direction.

7.2.12. Results of the in-depth study "Analysis of the effects on costs of the implementation of the preferred options for certification in the future"

7.3. OVER-ARCHING ISSUES

7.3.1. Main aims to be pursued when revising the '*acquis*'
7.3.2. Structure of the legislation
7.3.3. Legal instrument
7.3.4. Role of the CPVO
7.3.5. Definition of the terms 'marketing', 'seed' and 'seed marketing'
7.3.6. Quality of the information to the users

In particular, stakeholders from the forestry sector have complained about the lack of harmonisation between the supplier's documents and the need to further clarify them.

7.4. OTHER ISSUES

7.4.1. Impact of the S&PM *'acquis'* on the marketing of conservation varieties

Annex 6 – Link between the structure of the final report and the evaluation questions as listed in the ToR.

ACKNOWLEDGEMENTS

KEY MESSAGES FROM THE EVALUATION

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2. OBJECTIVES OF THE EVALUATION

3. SCOPE OF THE EVALUATION

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4.1. Overall methodological approach

4.2. Surveys of stakeholders

4.3. Interviews of stakeholders

4.4. In-depth studies

4.5. Methodology for the presentation of results

5. BACKGROUND INFORMATION

5.1. Intervention logic (EQ3)

5.2. History of the development of the S&PM legislation

5.2.1. Origin
5.2.2. Number and evolution of legislative texts
5.2.3. Exemptions of application in the MS and authorisations for more strict provisions (EQ1Ab)

5.3. Context into which the S&PM legislation operates

5.3.1. Description of the seed sector in the EU
5.3.2. Seed sector and economic evolution of commodity prices
5.3.3. Farmer's approach to varietal choice
5.3.4. Overall conclusions

6. THE 12 DIRECTIVES OF THE S&PM LEGISLATION

6.1. Description of the Directives

6.1.1. Organisational structure
6.1.2. Scope of the S&PM legislation
6.1.3. Perimeter of the S&PM legislation
6.1.4. Consistency between the provisions of the Directives

6.2. Consistency of the S&PM legislation with other EC policy interventions (EQ3)

6.2.1. Plant Variety Rights (EQ1Ag, h)
6.2.2. Human Health
6.2.3. Plant Health
6.2.4. Plant Protection Products
6.2.5. GMOs
6.2.6. Trade policy (EQ1Ai)

6.3. Implementation of the S&PM legislation in the MS

6.3.1. Simplicity of the S&PM Directives
6.3.2. Ease of implementation of the S&PM Directives
6.3.3. Utility of the S&PM Directives
6.3.4. Effectiveness in achieving the free marketing of S&PM in the EU
6.3.5. Efficiency in achieving the free marketing of S&PM in the EU
6.3.6. Results of the in-depth study: Effects of the implementation of the EU S&PM legislation in one New Member State (EQ4 a, b)

6.4. Governance of the S&PM legislation

6.5. Overall conclusions

7. ANALYSIS OF THE PAST/CURRENT PERFORMANCE OF THE S&PM LEGISLATION (EQ1)

7.1 Variety/material registration

7.1.1. Introduction

7.1.1.1. Concerned Council Directives of the S&PM legislation
7.1.1.2. Implementation in the MS

7.1.2. Variety registration costs (seed sector only) (EQ2)

7.1.2.1. Confidentiality of responses
7.1.2.2. General context
7.1.2.3. Structure of the variety registration costs
7.1.2.2. Overall estimation of the annual variety registration costs in the MS
7.1.2.3. Overall estimation of the part of the administrative costs in the variety registration costs

7.1.3. DUS (EQ1C, EQ5C)

7.1.3.2. Links with UPOV and Plant Variety Rights
7.1.3.1. Utility (EQ1A a)
7.1.3.3. Effectiveness in achieving the objectives of DUS testing
7.1.3.4. Efficiency in achieving the objectives of DUS testing (EQ1Ab)
7.1.3.5. Conclusions and recommendations (EQ5C)
7.1.3.6. Results of the in-depth study "Analysis for one crop of the feasibility of having DUS testing at European level rather than at national level" (EQ5Cb)
7.1.3.7. Results of the in-depth study "Analysis of the effects on costs of the implementation of the preferred options for DUS in the future" (EQ5)

7.1.4. VCU (EQ1C, EQ5C)

7.1.4.1. Utility (EQ1A a)
7.1.4.2. Effectiveness in achieving the objectives of VCU testing
7.1.4.3. Efficiency in achieving the objectives of VCU testing (EQ1Ab)
7.1.4.4. Conclusions and recommendations (EQ5C)
7.1.4.5. Results of the in-depth study "analysis for one crop of the effects of suppressing the VCU testing" (EQ5Cd)
7.1.3.7. Results of the in-depth study "Analysis of the effects on costs of the implementation of the preferred options for VCU in the future" (EQ5)

7.1.5. Variety denomination (EQ1B, EQ5B)

7.1.5.1. Utility
7.1.5.2. Effectiveness in achieving the objectives of variety denomination
7.1.5.3. Efficiency in achieving the objectives (EQ1Ab)
7.1.5.4. Conclusions and recommendations.

7.1.6. Common catalogues (EQ1D, EQ5D)

7.1.6.1. Utility (EQ1Aa)

7.1.6.2. Effectiveness in achieving the objectives of the Common Catalogue
7.1.6.3. Efficiency in achieving the objectives (EQ1Ab)
7.1.6.4. Rules on variety maintenance
7.1.6.5. Conclusions and recommendations

7.2. Certification (EQ1E, EQ5E)

7.2.1. Introduction

7.2.1.1. Concerned Council Directives of the S&PM legislation
7.2.1.2. Implementation in the MS

7.2.2. Certification costs (seed sector only) (EQ2)

7.1.2.1. Confidentiality of responses
7.1.2.2. General context
7.1.2.3. Structure of the certification costs
7.1.2.2. Overall estimation of the annual certification costs in the MS
7.1.2.3. Overall estimation of the part of the administrative costs in the certification costs

7.2.3. Utility (EQ1A a)

7.2.4. Coherence with OECD and UN-ECE standards (EQ3)

7.2.5. Effectiveness in achieving the objectives of certification (EQ1A b)

7.2.6. Efficiency in achieving the objectives (EQ1A b)

7.2.7. Quality of seed lots imported under the equivalence regime with third countries (EQ1A e)

7.2.8. Utility of the Comparative tests and trials (EQ 1E d)

7.2.9. Conclusions and recommendations (EQ5Aa, b).

7.2.10. Results of the in-depth studies "Analysis for 1 crop of the extension of the certification activities carried out under official supervision; "Analysis of the possible advantages of a private third party body set-up for supervision".

7.2.11. Results of the in-depth study "Analysis of the interest to connect and to bring together the seed phytosanitary requirements with the certification legislation for plant health".

7.2.12. Results of the in-depth study "Analysis of the effects on costs of the implementation of the preferred options for certification in the future" (EQ5)

7.3. Overarching issues

7.3.1. Main aims to be pursued when revising the legislation

7.3.2. Structure of the legislation (EQ5Ad)

7.3.3. Legal instrument (EQ5Ac)

7.3.4. Role of the CPVO (EQ1F, 5F)

7.3.5. Definition of the terms '*marketing*', '*seed*' and '*seed marketing'*

7.3.6. Quality of the information to the users

7.4. Other issues

7.4.1. Impact of the S&PM acquis on the marketing of conservation varieties (EQ4c)

8. SCENARIOS FOR THE FUTURE (EQ5)

8.1. *'Status quo'* scenario (baseline): description of the scenario

8.2. *'Suppress'* scenario: description of the scenario

8.3. '*Modify'* scenario: Summary list of the key options for the revision of the S&PM legislation.

9. IMPACT OF THE SCENARIOS FOR THE FUTURE (EQ5)

9.1. '*Status quo'* scenario (baseline): identification of the most significant economic, social and environmental impacts of maintaining the current situation.

9.2. '*Suppress'* scenario: identification of the most significant economic, social and environmental impacts and comparison with the baseline.

9.3. '*Modify'* scenario: identification of the most significant economic, social and environmental impacts and comparison with the baseline.

Annex 7 – Comparison of 'seed' and 'marketing' terms used in the EU seeds *acquis*

Common Catalogue	**Seed Marketing Directives**					
Directive 2002/53	***Directives 2002/54***	***Directive 2002/55***	***Directive 2002/56***	***Directive 2002/57***	***Directive 66/401***	***Directive 66/402***
no provisions	(6): 'Basic seed' & 'Certified seed': technical terms based on already existing international terminology; it should be possible under specified conditions to place on the market bred seed of generations prior to basic seed and seed as grown	(19), (20), (30): reference to the terms basic seed, certified seed and standards seed; it should be possible under specified conditions to place on the market bred seed of generations prior to basic seed and seed as grown	as in Directive 2002/54	as in Directive 2002/54	§**9**: as in Dir. 2002/54 (6)	§9: 'Basic seed' & 'Certified seed': technical terms based on already existing international terminology
no provisions	Art. 1: This Directive shall apply to the production with a view to marketing and to the marketing of … seed within the Community.	as in Directive 2002/54	as in Directive 2002/54	Art. 1: This Directive shall apply to the production with a view to marketing, and to the marketing within the Community, of seed intended for agricultural production but not for ornamental purposes.	as in Directive 2002/54	as in Directive 2002/54
no provisions	Art. 2.1(a): Definition of marketing: "*'marketing' shall mean the sale, holding with a view to sale, offer for sale and any disposal, supply or transfer aimed at commercial exploitation of seed to third parties, whether or not for consideration."* Trade in seed not aimed at commercial exploitation, and the supply of seed under certain conditions shall not be regarded as marketing.	as in Directive 2002/54	as in Directive 2002/54	as in Directive 2002/54	Art. 1a: as in Directive 2002/54 (Art. 1)	Art. 1a: as in Directive 2002/54 (Art. 1)
no provisions	Art. 2.2: seed definitions: Art. 2.2(c): 'basic seed' Art. 2.2(d): 'certified seed'; Art. 2.2(e): 'monogerm seed'; Art. 2.2(f): 'precision seed'	Art. 2.2: seed definitions: Art. 2.2(c): 'basic seed' Art. 2.2(d): 'certified seed'; Art. 2.2(e): 'standard seed'	Art. 2.2: seed definitions: Art. 2.2(b): 'basic seed potato' Art. 2.2(c): 'certified seed potato'	Art. 2.2: seed definitions: Art. 2.2(c): 'basic seed' (varieties other than hybrids); Art. 2.2(d): 'basic seed' (hybrids); Art. 2.2(e) - (i): 'certified seed'; Art. 2.2(j): 'commercial seed'	Art. 2: seed definitions: Art. 2.B: 'basic seed'; Art. 2.C: 'certified seed'; Art. 2.D: 'commercial seed'	Art. 2: seed definitions: Art. 2.C - D: 'basic seed' ; Art. 2.E - G: 'certified seed'

Annex 8 – Correlation of GM provisions of the EU S&PM *acquis*

Common Catalogue	Marketing Directives					
	Seeds			PM		FRM
Directive 2002/53	***Directives 2002/54, 2002/56 & 2002/57***	***Directive 2002/55***	***Directives 66/401 & 66/402***	***Directive 68/193***	***Directives 92/33, 92/34 & 98/56***	***Directive 99/105***
(16): GMOs defined according to Directive 90/220		as in Directive 2002/53				(15) (16)
(17): marketing of novel foods according to Regulation 258/97		as in Directive 2002/53				
Art. 4.4: acceptance of GM varieties only if measures taken to avoid adverse effects on human health & the environment	Art. 6.1: marketing authorisation for GM seed only if measures taken to avoid adverse effects on human health & the environment	Art. 4.2 (as in Art. 4.4 of Directive 2002/53)	Art. 4a.1	Art. 3.3	*no provisions*	Art. 5.1
Art. 4.5: approval of GM varieties in accordance with Regulation 1829/2003 on GM food & feed, when derived material is intended for food	*no provisions*	Art. 4.3 (as in Art. 4.5 of Directive 2002/53)	*no provisions*	Art. 5ba.3(a): approval of GM varieties in accordance with Regulation 1829/2003 on GM food & feed, when derived material is intended for food	*no provisions*	
Art. 7.4: acceptance of GM varieties requires environmental risk assessment equivalent to provisions of Directive 90/220	*no provisions*	as in Directive 2002/53	Art. 4a.1: environmental risk assessment according to Art. 7(4) of Directive 70/457	Art. 5ba: acceptance of GM varieties requires environmental risk assessment equivalent to provisions of Directive 2001/18	*no provisions*	(16) Art. 5.2
Art. 9.5: requires indication of GM variety as such in the catalogue (Art. 17)	Requires indication of GM seed as such on label/documents: Dir. 2002/54: Art. 17 Dir. 2002/56: Art. 15 Dir. 2002/57: Art. 14	as in Directive 2002/53 plus Article 31 (as in the corresponding Articles of the marketing Directives)	Art. 11a Art. 15.2 (Dir. 66/401 only)	Art. 5f Art. 10a	*no provisions*	Requires indication as such of GM varieties of the 'tested' category, as follows: Art. 10.2(j): in national registers Art. 13.1(k) & Art. 14.7: on lots during all stages of production
Art. 16.2: provisions applying to marketing prohibitions, including in the case of GM varieties, where valid reasons to consider variety presents risk to human health or the environment	*no provisions*	as in Directive 2002/53	*no provisions*	*no provisions*	*no provisions*	Art. 6.1(d): marketing prohibition for GM material listed in Annex I, unless of the 'tested' category & meets requirements of Annex V (transitional period to 31 Dec. 2012: Art. 27.2)
Art. 18 & Art. 23(3): procedure of MS application for authorisation of prohibition of GM seed/PM	*no provisions*	as in Directive 2002/53	*no provisions*	*no provisions*	*no provisions*	
Council Directive 90/220/EEC of 23 April 1990 on the deliberate release into the environment of genetically modified organisms						
Regulation (EC) No 258/97 of the European Parliament and of the Council of 27 January 1997 concerning novel foods and novel food ingredients						
Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed						

Annex 9 – Correlation of plant health provisions of the EU S&PM *'acquis'*

Common Catalogue	Marketing Directives						
	Seeds			PM			FRM
Directive 2002/53	***Directives 2002/54, 2002/57, 66/401 & 66/402***	***Directive 2002/55***	***Directive 2002/56***	***Directive 68/193***	***Directives 92/33 & 92/34***	***Directive 98/56***	***Directive 99/105***
					§ 5: harmonised conditions on PH to be consistent with Directive 77/93	(4): harmonised conditions on PH to be consistent with Directive 77/93	(4): harmonised conditions on PH to be consistent with Directive 77/93
					§ 7: determination of PH standards to be based on technical and scientific consideration	(7): determination of PH standards to be based on technical and scientific consideration	
						(22): interrelationship with Directive 77/93 under the SLIM initiative	
no provisions	*no provisions*	*no provisions*	*no provisions*	*no provisions*	Art. 4: PH conditions to be established (Annex I) with reference to Directive 77/93	Art. 1.1: Scope: Directive applies without prejudice To PH rules of Directive 77/93; Art. 4: PM shall, where applicable, comply with PH conditions of Directive 77/93	Art. 22: FRM shall, where applicable, comply with PH conditions of Directive 77/93; Art. 6.4: registration of FRM suppliers under Directive 77/93 may be deemed sufficient
no provisions	*no provisions*	*no provisions*	Art. 8.1: MS may require separation of domestic production from imports for PH reasons	*no provisions*	*no provisions*	*no provisions*	*no provisions*
no provisions	*no provisions*	*no provisions*	*no provisions*	Art. 13: acceptance of certification between MS provided inspections satisfy certain conditions, including on PH (as laid down in Annex I)	Art. 13: no further restrictions allowed for plant health reasons in the marketing of PM that complies with this Directive; Art. 24: measures to be taken to eliminate PH risk identified during MS official inspections	Art. 15: no further restrictions allowed in the marketing of PM that complies with this Directive	*no provisions*
Art. 16.2(a): provisions applying to prohibitions of use, where PH risk established	*no provisions*	as in Directive 2002/53	Art. 20: Art. 20.1: rules on Community comparative tests & trials,including those relating to PH; Art. 20.2: to be used to develop harmonised methods for checking PH conditions of compliance; Art. 20.3: when PH problems occur, the Commission shall notify the SCPH	Art. 16: Art. 16.1: rules on Community comparative tests and trials, including those relating to PH; Art. 16.2: to be used to develop harmonised methods for checking PH conditions of compliance; Art. 16.3: when PH problems occur, the Commission shall notify the SCPH	Art. 20: Art. 20.1: rules on MS tests and trials, including those relating to PH; Art.20.2:rules on Community comparative tests and trials; Art. 20.3: to be used to develop harmonised methods for checking PH conditions of compliance; Art. 20.4: when PH problems occur, the Commission shall notify the SCPH	Art. 14: Art. 14.2: rules on Community comparative tests and trials, including on PH; Art. 14.3: to be used to develop harmonised methods for checking conditions of compliance; Art. 14.4: when PH problems occur, in relation to organisms covered by Dir. 2000/29, the Commission shall notify the SCPH	*no provisions*
Art. 18 & Art. 23(2): procedure of MS application for authorisation of prohibition of seed/PM when PH risk is established	*no provisions*	as in Directive 2002/53	Art. 20.7: provisions applying to prohibitions Of use, for PH reasons (virus infection, Annex I) established through comparative tests & trials	*no provisions*	*no provisions*	*no provisions*	*no provisions*
no provisions	*no provisions*	*no provisions*	Art.21: equivalence of imports from TCs:MS authorised to extend to 31/3/2008 own decisions on this,so long as they respect PH obligations of Directive 2000/29	*no provisions*	Art. 16: 'equivalence' of imports from TCs: MS authorised to extend to 31/12/2012 own decisions on this, so long as they respect PH obligations of Directive 77/93	Art. 11: 'equivalence' of guarantees, including on PH, for PM produced in TCs	*no provisions*
Council Directive 77/93/EEC of 21 December 1976 on protective measures against the introduction into the Member States of organisms harmful to plants or plant products							
Council Directive 2000/29/EC of 8 May 2000 on protective measures against the introduction in the Community of organisms harmful to plants or plant products and against their spread within the Community							

Annex 10 – VCU networks in EU 27 MS

The following table presents the answers of the MS authorities to the following VCU question of the preliminary questionnaire: "*Please list all the crops for which you have implemented VCU networks during the last 10 years"*.

Considering that the authorities have answered to the question according to different levels of details, it is not possible to make statistics or calculations. Nevertheless, the following observations can be made:

- Some MS carry out VCU testing for vegetable propagating and planting material other than seed or for forestry reproductive material, while not being compulsory;
- VCU testing is carried out for species not listed in the S&PM Coucil Directives but not in a significant way;
- New MS (e.g. Romania) seem to cover a larger number of species with VCU testing than EU 15 MS.

Number of VCU networks per species in the EU 27

Common Name	Latin name	Group	Directive	Not listed	AT	BE	BG	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IT	LT	LV	LU	MT	NL	PL	PT	RO	SE	SI	SK	UK
Sugar Beet	*Beta vulgaris*	seed	2002/54/EC		1				1	1	1	1	1		1	1	1		1	1	1			1	1		1	1		1	1
Fodder beet	*Beta vulgaris*	seed	2002/54/EC			1			1	1	1	1	1		1		1			1	1				1		1		1	1	
Industrial Chicory		seed	2002/54/EC												1									1							
Spinach Beet		seed	2002/54/EC			1																									
Total beet seed					***1***	***2***			***2***	***2***	***2***	***2***	***2***		***3***	***1***	***2***		***1***	***2***	***2***			***2***	***2***		***2***	***1***	***1***	***2***	***1***
Barley	*Hordeum vulgare*	seed	66/402/EEC		1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1
Canary grass	*Phalaris canariensis*	seed	66/402/EEC						1																1						
Durum Wheat	*Triticum durum*	seed	66/402/EEC		1			1	1	1			1		1	1	1		1						1	1	1			1	
Maize	*Zea mays*	seed	66/402/EEC		1	1			1	1	1	1	1		1	1	1		1	1	1	1		1	1	1	1		1	1	1
Oats	*Avena sativa*	seed	66/402/EEC		1	1		1	1	1	1		1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1
Rice	*Oryza sativa*	seed	66/402/EEC										1		1	1	1		1						1	1	1				
Rye	*Secale cerealis*	seed	66/402/EEC		1	1			1	1	1	1	1	1			1			1	1	1		1	1		1	1	1	1	1
Spring Triticale		seed	66/402/EEC														1														
Sorghums	*Sorghum bicolor*	seed	66/402/EEC		1					1			1		1		1		1						1	1	1				
Sudangrass	*Sorghum sudanense*	seed	66/402/EEC		1						1		1				1		1						1		1				
Triticale		seed	66/402/EEC		1				1	1	1	1	1	1	1	1	1		1	1	1	1		1	1	1	1	1	1		1
Wheat		seed	66/402/EEC		1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1
	Sorghums x sudan grass hybrid	seed	66/402/EEC							1			1				1		1								1				
	X Triticosecale	seed	66/402/EEC																											1	
Total cereal seed					***9***	***5***		***4***	***8***	***9***	***7***	***5***	***11***	***5***	***8***	***7***	***12***	***3***	***10***	***6***	***6***	***6***		***6***	***11***	***8***	***11***	***5***	***6***	***7***	***6***
Forest		Forest	1999/105/EC							1							1														
Poplars and Willows		Forest	1999/105/EC																											2	
Poplars	*Populus*	Forest	1999/105/EC										1																		
Total forest reproductive material										***1***			***1***				***1***													***2***	
Fodder plants		seed	66/401/EEC						1										1	1		1			1			1	1		
Fodder Crops		seed	66/401/EEC													1															
Amenity		seed	66/401/EEC																									1			
Bean	*Vicia faba*	seed	66/401/EEC																							1					
Faba Bean	*Vicia faba*	seed	66/401/EEC		1																										
Field beans	*Vicia faba*	seed	66/401/EEC			1				1	1	1	1		1		1	1			1						1			1	1
French bean		seed	66/401/EEC									1																		1	
Birdsfoot Trefoil	*Lotus spp*	seed	66/401/EEC		1					1		1			1		1										1				
Black medick	*Medicago lulupina*	seed	66/401/EEC							1																					
California Bluebell	*Phacelia tanacetifolia*	seed	66/401/EEC		1					1					1		1				1										
Clover	*Trifolium spp*	seed	66/401/EEC															1								1					
Alsike Clover	*Trifolium hybridum*	seed	66/401/EEC							1					1						1										

Common Name	Latin name	Group	Directive	Not listed	AT	BE	BG	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IT	LT	LV	LU	MT	NL	PL	PT	RO	SE	SI	SK	UK
Berseem Clover	*Trofolium spp*	seed	66/401/EEC							1							1										1				
Crimson Clover	*Trifolium*	seed	66/401/EEC							1			1		1		1														
Persian Clover	*Trifolium*	seed	66/401/EEC							1							1										1				
Red Clover	*Trifolium spp*	seed	66/401/EEC		1	1				1	1	1	1	1	1		1				1						1			1	
White Clover	*Trifolium*	seed	66/401/EEC		1	1				1	1	1	1		1		1				1						1			1	1
Cocksfoot	*Dactylis g.*	seed	66/401/EEC		1					1	1	1	1		1		1				1					1	1			1	
Creeping bent	*Agrostis s.*	seed	66/401/EEC							1		1	1				1										1				
Velvet bent	*Agrostis canina*	seed	66/401/EEC							1																					
Fenugreek	*Trigonella f.*	seed	66/401/EEC							1							1														
Fescue	*Festuca*	seed	66/401/EEC																							1					
Meadow Fescue	*Festuca p.*	seed	66/401/EEC		1	1				1	1	1		1	1		1				1						1			1	
Sheep's fescue		seed	66/401/EEC												1																
Red Fescue	*Festuca r.*	seed	66/401/EEC		1	1				1	1	1	1	1	1		1				1						1			1	
Sheep's fescue	*Festuca o.*	seed	66/401/EEC							1		1		1			1										1				
Tall fescue	*Festuca a.*	seed	66/401/EEC							1		1	1	1	1		1										1				
Fodder Kale	*Brassica oleracea acephala*	seed	66/401/EEC							1					1		1														
Fodder Radish	*Raphanus sativus*	seed	66/401/EEC							1		1			1		1				1			1							
Radish		seed	66/401/EEC			1																									
Fodder Sorghum		seed	66/401/EEC												1																
Golden Oatgrass	*Trisetum spp*	seed	66/401/EEC		1																										
Lucerne	*Medicago s.*	seed	66/401/EEC		1					1	1	1	1		1		1				1						1			1	
Lupins	*Lupinus albus*	seed	66/401/EEC		1																										1
Blue Lupin	*Lupinus spp*	seed	66/401/EEC							1			1		1																
White Lupin	*Lupinus a.*	seed	66/401/EEC							1			1		1		1										1				
Yellow Lupin		seed	66/401/EEC							1			1				1				1										
Meadow Foxtail	*Alopecurus p.*	seed	66/401/EEC		1					1																					
Fodder Grasses		seed	66/401/EEC																					1							
Bent grass	*Agrostis*	seed	66/401/EEC												1																
Meadow grass		seed	66/401/EEC																		1										
Annual Meadow Grass	*Poa annua*	seed	66/401/EEC								1																				
Rough-stalked meadowgrass		seed	66/401/EEC							1		1			1																
Tall Meadow		seed	66/401/EEC		1																										
Wood meadowgrass		seed	66/401/EEC							1																					
Smooth Stalked Meadowgrass	*Poa spp*	seed	66/401/EEC		1					1	1	1		1	1		1										1				
Red Canary grass		seed	66/401/EEC									1																			
Rescue Grass	*Bromus c.*	seed	66/401/EEC												1																
Tall Oatgrass		seed	66/401/EEC							1																				1	
Minor Herbage		seed	66/401/EEC																												

Common Name	Latin name	Group	Directive	Not listed	AT	BE	BG	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IT	LT	LV	LU	MT	NL	PL	PT	RO	SE	SI	SK	UK
Pea		seed	66/401/EEC			1								1	1						1							1		1	
Field Pea	*Pisum sativa*	seed	66/401/EEC		1					1	1	1	1		1		1	1									1				1
Garden pea		seed	66/401/EEC									1																			
PRG IRG HRG		seed	66/401/EEC																												1
Redtop	*Agrostis g.*	seed	66/401/EEC														1													1	
Redtop Bentgrass	*Agrostis g.*	seed	66/401/EEC		1																										
Roth Redtop		seed	66/401/EEC							1																					
Sainfoin	*Onobrychis v.*	seed	66/401/EEC							1			1		1		1										1				
Rye grass		seed	66/401/EEC															1								1					
Hybrid Ryegrass	*Lolium b.*	seed	66/401/EEC		1	1				1	1	1	1		1						1						1				
Italian Ryegrass		seed	66/401/EEC		1	1				1	1	1	1	1	1		1				1						1			1	
Perennial Ryegrass	*Lolium p.*	seed	66/401/EEC		1	1				1	1	1	1	1	1		1				1						1			1	
Westerw. Ryegrass		seed	66/401/EEC								1	1																			
Smooth brome	*Broma spp*	seed	66/401/EEC									1																			
Timothy	*Phleum*	seed	66/401/EEC		1	1				1	1	1		1	1		1				1						1				1
Timothy Small	*Phleum*	seed	66/401/EEC									1			1																
Tufted hairgrass		seed	66/401/EEC									1																			
Vetches	*Vicia v.*	seed	66/401/EEC		1																										
Common Vetch	*Vicia sativa*	seed	66/401/EEC			1		1		1		1	1		1		1										1				
Hairy Vetch	*Vicia v.*	seed	66/401/EEC							1							1														
Hungarian vetch	*Vicia p.*	seed	66/401/EEC							1							1													1	
	Trigonella Foenum	seed	66/401/EEC																								1				
Total fodder plant					***21***	***12***		***1***	***0***	***39***	***15***	***27***	***18***	***10***	***31***	***0***	***30***	***4***	***0***	***0***	***17***	***0***		***2***	***0***	***5***	***23***	***2***	***0***	***14***	***6***
Black mustard	*Brassica nigra*	seed	2002/57/EC																						1						
Brown Mustard	*Brassica j.*	seed	2002/57/EC						1	1					1		1		1						1						
Caraway	*Carum carvi*	seed	2002/57/EC		1						1						1			1					1		1			1	
Colza		seed	2002/57/EC						1																						
Cotton	*Gossypium*	seed	2002/57/EC										1			1			1						1						
Flax	*Linum u.*	seed	2002/57/EC		1	1			1	1	1	1		1	1				1	1	1			1	1		1			1	
Forage Rape		seed	2002/57/EC												1																1
Groundnut	*Arachis*	seed	2002/57/EC														1								1		1				
Hemp	*Cannabis s.*	seed	2002/57/EC		1				1	1			1	1	1		1		1					1	1		1				
Linseed	*Linum u.*	seed	2002/57/EC									1			1		1			1						1	1				1
Mustard		seed	2002/57/EC																	1											
Oil seed rape		seed	2002/57/EC															1				1				1			1		
Opium poppy	*Papaver s.*	seed	2002/57/EC						1	1			1																	1	

Common Name	Latin name	Group	Directive	Not listed	AT	BE	BG	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IT	LT	LV	LU	MT	NL	PL	PT	RO	SE	SI	SK	UK
Poppy Seed	*Papaver s.*	seed	2002/57/EC								1																				
Poppy	*Papaver s.*	seed	2002/57/EC		1												1								1						
Rape		seed	2002/57/EC												1																
	Raphanus sativus	seed	2002/57/EC							1																					
Safflower		seed	2002/57/EC						1				1				1								1						
Soja	*Glycine max*	seed	2002/57/EC		1				1	1			1		1	1	1		1	1					1		1			1	1
Sunflower	*Helianthus a.*	seed	2002/57/EC		1					1			1	1	1	1	1		1						1	1	1		1	1	1
Turnip rape	*Brassica rapa*	seed	2002/57/EC							1		1			1		1			1					1			1			
Turnip Spring type	*Brassica rapa*	seed	2002/57/EC											1																	
Turnip Winter Type	*Brassica rapa*	seed	2002/57/EC											1																	
White Mustard		seed	2002/57/EC			1			1	1	1	1			1		1		1		1			1	1		1			1	
Swede rape	*Brassica napus*	seed	2002/57/EC		1	1				1	1	1	1	1	1		1		1	1	1				1		1		1	1	1
Total seed of oil and fibre plants					***7***	***3***			***8***	***10***	***5***	***5***	***7***	***6***	***11***	***3***	***12***	***1***	***8***	***7***	***3***	***1***		***3***	***14***	***3***	***9***	***2***	***2***	***7***	***5***
Potatoes		seed	2002/56/EC		1	1			1	1	1	1		1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1
Total seed potatoes					***1***	***1***			***1***	***1***	***1***	***1***		***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***		***1***	***1***	***1***	***1***	***1***	***1***	***1***	***1***
Fruits		PM	92/33/EC																											1	
Fruit Plants		PM	92/33/EC																						1						
Fruit trees		PM	92/33/EC																	1											
Ornamental		PM	92/33/EC																						1						1
Wild Cherry	*Prunus avium*	PM	92/33/EC												1																
Total vegetable propagating and planting material other															***1***					***1***					***2***					***1***	***1***
Kale	*Brassica oleracea*	seed	2002/55/EC																												1
Kohlrabi	*Brassica oleracea*	seed	2002/55/EC							1																					
Oil Pumpkin		seed	2002/55/EC		1																										
Vegetables		seed	2002/55/EC							1	1									1					1					1	
Whiteloof Chicory		seed	2002/55/EC			1																									
Total vegetable seed					***1***	***1***				***2***	***1***									***1***					***1***					***1***	***1***
Vine		PM	68/193/EC												1										1	1			1		
	Vitis	PM	68/193/EC							1																				1	
Total material for vegetative propagation of the vine										***1***					***1***										***1***	***1***			***1***	***1***	

Common Name	Latin name	Group	Directive	Not listed	AT	BE	BG	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IT	LT	LV	LU	MT	NL	PL	PT	RO	SE	SI	SK	UK
Brown top	*Agrostis cappilaris*	seed		1						1		1		1													1				
Buckwheat	*Fagopyrum esculentum*	seed		1																1	1										
	Artemisia dracunculus	seed		1																							1				
Chick Pea	*Cicer arietinum*	seed		1												1															
	Coriandrum Sativum	seed		1																							1				
	Datura Innoxia	seed		1																							1				
	Digitalis Lanata	seed		1																							1				
Festulolium		seed		1							1			1	1																
Lentil	*Lens culinaris*	seed		1												1															
	Lavandula Angustifolia			1																							1				
	Lotus Corniculatus	seed		1																										1	
	Mentha Piperita	seed		1																							1				
	Mentha Spiciata	seed		1																							1				
Basilicum	*Ocium Basilicum*	seed		1																							1				
Millet	*Panicum Miliaceum*	seed		1																							1				
	Plantago	seed		1																							1				
	Ricinus Communis	seed		1																							1				
	Symphytum officinale	seed		1																							1				
	Thymus Vulgaris	seed		1																							1				
Tobaco		seed		1												1				1							1				
	Trisetum Flavescens	seed		1						1																				1	
	Triticum Dicoccum	seed		1																1											
	Triticum Monococcum	seed		1																1											
	Agropyron	seed		1																							1				
	Bromus inermis	seed		1																							1				
	Phalaris Arundinacea	seed		1										1													1				
White Sweet Clover	*Melilotus alba*	seed		1								1																			
	Setaria italica	seed		1																							1				
	Trifolium subterraneum	seed		1																1											
			Total not listed seed	***29***						***2***	***1***	***2***		***3***	***1***	***3***			***4***	***1***	***1***						***19***			***2***	
			Total	***29***	***40***	***24***	***0***	***5***	***20***	***67***	***32***	***42***	***39***	***25***	***57***	***16***	***58***	***9***	***25***	***20***	***30***	***9***	***0***	***14***	***33***	***18***	***65***	***12***	***12***	***38***	***21***
Ad Hoc other species		*seed*		*1*							*1*																				
Agricultural Species		*seed*		*1*			*1*																								

Annex 11 – Description of the seed regulatory framework in key seed markets outside the EU

1. Australia

Source: Compiled by Arcadia International based on input from John Blackstock - Chief Executive Officer - Australian Seeds Authority Ltd.

While general trade practices and consumer protection laws apply to all commerce in Australia, there is no Australian seed legislation equivalent to the EU Directives to control the production, labelling and marketing of seed.

The Australian Seed Federation, the main seed industry organisation, administers a National Code of Practice for Seed Labelling and Marketing. The Code is not mandated by legislation but is binding on all Australian Seed Federation members and many companies are accredited under the Code.

Variety registration

While there are no mandatory requirements for official VCU testing of varieties marketed in Australia, varieties must be registered by the Australian Seeds Authority Limited (ASA) and added to the ASA National List before they can be certified under the Australian or OECD Seed Schemes.

The breeder/maintainer of the variety must provide to ASA:

- information on the origin, uniformity and stability of the variety;
- a detailed morphological description of the variety based on UPOV guidelines on the development of harmonized, internationally recognized descriptions of protected varieties (the description of characters must be consistent with that required for applications to the Australian Plant Breeder's Rights Office);
- information on the agronomic value of the variety in Australia;
- information on variety maintenance procedures for the variety;
- confirmation that standard samples of the variety have been provided to relevant certification agencies; and
- written approval of the breeder/owner for the variety to be certified under the relevant seed schemes.

Strong post registration networks test the varieties of interest and make recommendations to farmers who have access to independent results on the performance of recently released grain and field crop varieties from trials conducted across Australia. This information is stored and available from the NVT (National Variety Testing) Online database to help in making crop variety selection decisions. This interactive way of publishing results offers the possibility for users to search for varieties adapted to their local agro-climatic conditions.

Seed Certification

There are no seed marketing laws in Australia which require seed to be certified under official certification schemes. An Australian Seed Certification Scheme, based closely on the technical rules of the OECD Seed Schemes, operates on a voluntary basis to meet domestic market requirements.

The OECD Seed Schemes also operate on a voluntary basis to meet export market requirements. OECD certification is generally only used by seed companies to meet mandatory requirements of some importing countries, including the EU. This is particularly the case for proprietary varieties.

While a significant proportion of seed of forage species is certified, a high proportion of Australian cereal, pulse and oilseed seed sold in internal and export markets is not certified but is produced under a range of quality assurance schemes operated by State government agencies, independent private inspection bodies and seed companies to meet customer demands. Some of these quality schemes are

adapted from OECD Seed Scheme standards and all seed testing in Australia is conducted in accordance with ISTA Rules. A number of quality schemes conducted by seed companies have more stringent minimum varietal purity, germination and physical purity standards than those applied under the OECD Schemes.

The Australian Government, represented by and acting through the Department of Agriculture, Fisheries and Forestry (DAFF), has licensed the Australian Seeds Authority Limited (ASA) to perform all of the functions of the National Designated Authority for the OECD Seed Schemes and ISTA. ASA is accountable to DAFF through a range of reporting obligations and is subject to participation in performance audits by DAFF to establish compliance with licence requirements.

ASA is required under the Australian Government licence to administer the OECD Seed Schemes in Australia and appoints by contractual arrangements appropriately qualified providers of seed certification services as designated certification agencies for the purpose of implementing operational aspects of the Rules and Directions of the Schemes. To meet this obligation ASA has commissioned the National Association of Testing Authorities (NATA), as a peak independent authority in Australia for the accreditation of inspection bodies, to implement a national accreditation scheme for certification agencies.

NATA accreditation of seed certification agencies requires compliance with the international quality management systems standard "ISO/IEC 17020:1998(E) General criteria for the operation of various types of bodies performing inspection" plus demonstrated technical competence in meeting ASA technical standards for the Australian and OECD Schemes. The ASA technical standards require that all seed certified under the Australian and OECD Schemes must be tested in ISTA-Accredited seed testing laboratories.

Certification agencies which achieve NATA accreditation and execute a cooperation agreement with ASA are designated by ASA to act on its behalf in implementing operational aspects of the Rules and Directions of the OECD Seed Schemes in Australia.

2. Canada

Source: Compiled by Arcadia International based on discussion with CFIA officials

The Canadian Food Inspection Agency (CFIA) is responsible for the administration of the Seeds Act and Regulations, Parts I (seed other than seed potatoes), III (variety registration) and IV(registration of establishments that prepare seed and the licensing of operators) to help to ensure that seeds sold in, imported into and exported from Canada meet established standards for quality, including varietal purity and germination, and are labelled so that they are properly represented in the market place , and in the case of most agricultural crop varieties, are registered prior to sale in Canada.

Section 3(1) (b) of the Seeds Act states that: "no person shall sell or advertise for sale in Canada or import into Canada seed of a variety that is not registered in the prescribed manner."

In Canada the term "Variety Registration" refers to the requirement for major agricultural crop kinds to be catalogued by a single, officially recognized variety name in order to standardize the name by which a variety is marketed. This is deemed to be a form of consumer protection, as it provides a level of confidence to the buyer that the seed will produce plants exhibiting known, desired characteristics. Depending upon the crop kind, registration for some varieties may include a merit requirement to establish that new varieties are as good as, or better than existing varieties. "Merit" generally refers to the varietal characteristics that enhance the variety's value for a particular use in a region of Canada. Performance testing refers to variety trials, historically conducted by provincial or university extension services, to determine a variety's relative quality and yield over time. Normally, three years of data are required for most crop kinds subject to registration. It has to be noticed that trialling systems are crop specific and that efforts are shared between official authorities and industry (e.g. in Canola, a 2 years system is in place. Breeders have to provide data coming from Private co-op trials (first year of testing), and public co-ops trials are conducted for 1 year (second year of testing)).

The three requirements for recognizing new varieties are that they be "distinct, uniform and stable" (DUS) as understood in the Canadian Variety Registration context. The first step in variety registration, therefore, is variety recognition to assure that a variety is indeed new and unique in some desirable way (to recognize that varieties are distinct) and then to catalogue varieties by variety name. There are no DUS trials implemented and Distinctness, Uniformity and Stability is being assessed by reviewing information submitted by the breeder (pedigree, breeding method applied, morphological description of the varieties performed by the breeder, type of variety – hybrid, open pollinated variety, population, etc…).

The name also meets the variety certification eligibility requirements of Canada and other international seed certification programs designed to facilitate international trade in seeds.

As a conclusion, if a set of varietal characteristics carries a single name, farmers will readily understand how that variety will perform and can choose varieties that best fit the agronomic conditions on the farm. If there is a proliferation of names internationally for a variety, the registration and certification process can keep track of the synonyms for that variety and at least help to sort through the different names.

Post registration performance testing and recommending trials help to provide further information about varieties, such as varietal uniformity, stability and value for use in a particular region.

CFIA is the national authority for the seed certification system. Seed certification is defined in the federal Seeds Act and Regulations in which the Canadian Seed Growers' Association (CSGA) is designated as the national Association responsible for prescribing varietal purity standards and certifying all agriculture seed crops except potatoes.

For seed to be certified in Canada, it must be a variety officially recognized as eligible for certification and be multiplied according to strict process standards:

- variety purity standards established by CSGA; and
- physical purity, germination and diseases standards prescribed by federal Seeds Regulations in which CFIA is responsible for 1) enforcement, 2) Registered Seed Establishment (RSE) registration and 3) Canadian Seed Institute (CSI) recognition. CSI is responsible for auditing of RSE quality systems.

The Canadian system is quite similar to the EC schemes as, as an example, it introduces minimum standards or maximum levels of impurity for each crop.

3. Kenya

Source: Information provided by General Manager – Planning & Implementation – KEPHIS

Variety registration

Variety registration in Kenya involves two types of variety tests, which the candidate has to pass.

1. DUS

These are tests to determine the Distinctness (D), Uniformity (U) and Stability (S) of the candidate variety. The examinations are conducted following UPOV test guidelines and standards for the respective species. Where the candidate species has no established UPOV test guideline, a national guideline is developed and applied according to the UPOV protocol. The DUS test takes two cropping seasons. The DUS examination produces a descriptor (identity) of the variety that will be used for seed crop certification.

DUS examination results are also used to determine the suitability of a variety for grant of Plant Breeders' Rights (PBR). A candidate for PBR must satisfy the DUS criterion to qualify for protection. Kenya is a member of UPOV under the 1998 Convention and varieties are granted protection for a period of 15 years (18 years for vines and trees).

2. National Performance Trials

The candidate is also subjected to national performance trials (NPT) in which the variety is evaluated for its value for cultivation and use. The variety is planted in trials alongside officially released varieties that are popularly cultivated in the respective agro-ecology (check varieties) for which the variety is bred and its agronomic performance monitored. The NPT is planted for a minimum of two and a maximum of three cropping seasons.
Data from the NPT is presented to NPT Committee for deliberations. The NPT Committee is chaired by KEPHIS and is a technical Committee that comprises breeders and all other stakeholders for the crop. The committee makes recommendations for the suitability of the candidate for release for commercialization. A candidate would be recommended for release if it statistically performs significantly better than the mean performance of the check varieties. It might also be considered for release if it performs statistically similar to the check varieties but it also has certain additional attributes that are of economic importance in the agro-ecological zone (e.g. performance against important diseases, pests, etc).

The recommendations for release by the NPT Committee are forwarded to the National Variety Release Committee (NVRC). This is a policy committee that is chaired by the Agriculture Secretary and members are stakeholders for the crop. The NVRC studies and makes further recommendations on the NPT Committee's decisions. The recommendations from the NVRC are forwarded to the Minister for Agriculture, who officially declares a variety released for commercialization. After the declaration by the Minister, the variety is listed into the official National Variety Index and an official Kenya Gazette notice is issued on the new listing.

Seed certification
In Kenya, introduction, selection and testing of adaptability for major crops started in early 1900's. However, it was not until 1950s that active plant breeding and seed production was started. The research work was concentrated on a few crops. These were mainly wheat, barley and pastures. In 1955 a maize crop improvement programme was started at the National Agricultural Research Centre, Kitale. In 1962, the first double cross maize hybrid was released for commercialisation. In 1970s potato breeding, grain legume and oil crops improvements were started. The Kenyan seed industry has an array of seed crops; however maize is by far the most important crop in the seed industry.

The orderly procedure for production and processing, leading to certification, marketing, importation and exportation of seeds is under the legal requirements of "The Seeds and Plant Varieties Act" (Cap 326) of the Laws of Kenya enacted in 1972 and operationalized in 1976.
Kenya is a member of the OECD Seed Scheme and applies the Scheme's field inspection and post control standards in her seed certification.

KEPHIS ensures that only high quality seed of released varieties is available for use by the farmers. This is achieved through field inspection, seed processing, seed testing and post control plots. Growers must be identified by a seed company and be approved by a seed allocation panel. The varieties to be certified must have been tested in National Performance Trials, officially released and entered into the National Variety List.

1. Field Inspection

This is the first step in seed certification. Before field inspection commences the seed merchants must:

1. Register their fields for inspection.
2. Provide proof of origin of the parental materials of the varieties registered for inspection (or labels).
3. Observe minimum isolation distance.
4. Provide variety descriptors (DUS data)

Timely inspection in the fields are conducted to ensure that seed resulting from a crop meant for seed purpose is of the designated variety (trueness to type) and has not been contaminated genetically or

physically (varietal purity) beyond certain specific limits. The crop must be healthy and free from disease.

2. Seed Processing

Seed crops of approved fields are harvested and processed to remove undesirable contaminants such as weed seeds, inert material, immature seeds, broken and diseased seeds. The seeds are also graded into different sizes and treated with protective chemicals.

3. Seed Testing

Laboratory seed testing is useful in determining quality factors such as purity, germination capacity, moisture content and health status (seed-borne diseases).

4. Labelling and Sealing

Upon satisfactory fulfilment of the prescribed requirements, every seed lot is provided with a label and a seal. Containers are labelled and sealed in such a way that the seed cannot be removed or changed without damaging, beyond repair, neither the container, the label nor the seal.

Post Control tests

These are tests designed to ascertain whether or not the preceding control measures have been effective. The tests ensure that the characteristics of the cultivars/varieties have remained unchanged in the process of multiplication. Under special circumstances, pre-control tests are necessary to determine satisfactory fulfilment of doubted factors.

4. South Africa

Source: compiled by Arcadia based on Information provided by E. Goldschagg – South African National Seed Association

Listing of varieties

Plants and propagating material for production may only be sold in terms of the provisions of Article 13 of the Plant Improvement Act, 1976 (Act 53 of 1976):

- if it is a variety that has been entered on the variety list;
- under the denomination under which it has been entered on the variety list.

The variety must first be evaluated under local conditions and described by the Directorate, before a new variety can be placed on the variety list. These descriptions are necessary as they are used during certification and also for post-control purposes. If a description differs from all known local varieties and therefore is "new", and it also complies with uniformity and stability tests, then it would be placed on the variety lists.

In terms of the Plant Improvement Act the Minister may also require other trials, apart from the DUS tests, in order to determine the agricultural or industrial value of a specific variety, i.e. whether the variety is acceptable to the end user of the harvested product. Trials are conducted by different institutes, although the Minister does not prescribe specific tests.

These institutes plant National Cultivar Trials in the main cropping areas across the country and pay attention primarily to adaptability, susceptibility for diseases, yield potential, harvestability, etc.

Annual cultivar evaluation meetings are held, as soon as the Directorate has completed the DUS tests and all other institutions have reported on their trials, and stakeholders can submit comments and present reports. The owner of the variety shall then be able to make a decision based on recommendations whether he/she will proceed with listing of the variety concerned. The decisions of the committee are then submitted to the Registrar of Plant Improvement who has the final say of placing on the variety list.

Certification schemes

In terms of Article 23 of the Act, the Minister of Agriculture can establish schemes that make provision for plants or propagating material to be certified with the purpose of maintaining the quality of the plants and propagating material and to ensure their usefulness for agricultural or industrial purposes. The Minister may prescribe various requirements to which plants and propagating material must comply with, before it can be certified.

At present the following certification schemes have been established in terms of the Plant Improvement Act:

- The South-African Seed Certification Scheme in which case the Minister has appointed SANSOR as the Authority to manage and execute the scheme;
- The South-African Plant Certification Scheme for Wine Grapes in which case the Minister has appointed the Executive Board of the Wine Improvement Association as Authority to manage the scheme;
- The Deciduous Fruit Plant Certification Scheme in which case the Minister has appointed the Executive Board of the Deciduous Fruit Improvement Association as Authority to manage the scheme; and
- The South-African Potato Tuber Certification Scheme, the designated Authority being Potatoes South Africa.

The objective of the Seed certification Scheme is to make available seed of high quality and to guarantee this quality by means of a certificate, seal and label. Emphasis is placed on varietal purity, in combination with a high level of germination and physical purity.

This scheme also provides for certifying disease-free status of certain crops, for example dry beans. Plants are inspected during active growth for the visual freedom from specific diseases, and this is then verified by way of laboratory tests on the seed.

The Seed Certification Scheme is also harmonised with the OECD-Schemes for the certification of seed moving in the international trade.

It is well defined and not only contains a clear list of contents regarding the general requirements for the certification of seed, but also as regards the specific requirements for each kind of plant listed under the Scheme.

The specific requirements for plants include for each kind of plant conditions set in terms of:

- Land requirements;
- Planting requirements;
- Isolation requirements;
- Requirements for plants;
- Requirements for inspection; and
- Physical requirements of seed.

The Seed Certification Scheme is a voluntary action (except if the owner of the variety under table 8 of the Act wishes to restrict sales to Certified seed only).

Certification of seed is undertaken by seed companies that are members of SANSOR and that have authorised inspectors in their employ. Since certification is a voluntary action, any person or institution can apply for certification of seed. SANSOR shall provide the names of authorised inspectors for the specific crop being applied for certification, in the event that a person or institution is not a member of SANSOR.

SANSOR will only accept test reports from laboratories that are registered as seed testing laboratories. Those laboratories that operate in accordance with rules and requirements of ISTA are authorised,

registered and monitored by the Official Seed Testing Laboratory of the Department of Agriculture, Registrar of Plant Improvement.

5. USA

Source: Compiled by Arcadia International based on discussion with USDA representatives

In the United States, the Federal Seed Act (FSA) regulates agricultural and vegetable seeds shipped and advertised in interstate commerce. The FSA is a truth-in-labeling law that requires certain quality information to be present on seed labels. The FSA contains no quality standards that seed must meet prior to sale. The FSA regulations contain minimum procedures and standards for certifying seed for varietal purity that all 50 State Seed Certifying Agencies must follow. FSA Regulations can be viewed at http://www.access.gpo.gov/nara/cfr/waisidx_06/7cfr201_06.html

Each of the 50 States has their own State Seed Law that regulates seed sold in their individual State. These State Seed Laws are very similar to the FSA. The Association of American Seed Control Officials (AASCO), an association of Federal and State Seed Regulatory Programs, maintains a Recommended Uniform State Seed Law (RUSSL) to guide its members. RUSSL can be viewed on the AASCO website www.seedcontrol.org

In the United States, seed does not have to be certified for varietal purity prior to sale. In fact, most of the seed sold in the United States is uncertified.

Also, the United States has no variety registration system and no national review system, so no statutory performance testing, to approve varieties before they can be sold. Seed companies are able to market their varieties as soon as they are developed. The testing of variety performance is carried out by breeders at universities.

The assessment protocols integrate a range of standard parameters that exist in the VCU tests used in the EU. This system allows flexibility in the release of varieties for specific purposes, such as lower yielding varieties that possess excellent processing characteristics in a particular niche market.

The American farmers reference the regional testing data for their variety selection as this system provides valuable data for farmers by taking into account the variability in regional environments. This approach is similar to the national post-registration schemes that exist in Europe. These trialing networks are the main source of reliable information for the farmers as farmers can pick up results coming from trials located in same agro-climatic environment when the variety has been tested in farming practices (large plots with adequate agronomic package).

Annex 12 – description of the EU seed sector & its actors

1. Crop production in the EU[7]

The EU crop production sector can be defined by presenting the acreages of the major crops in the EU MS. In 2005, Eurostat estimated land use in the European Union (EU 25) at 162 million ha of which arable land represented 100 million ha. France (30 million ha of usable agricultural area), Spain (26 million ha), Germany and UK (about 17 million ha) and Italy (14 million ha) are the most important agricultural EU 15 MS. Poland (16 million ha) and Romania (14 million ha) are the two biggest EU 10 NMS. These 7 countries represent more than 70% of the total EU agricultural area.

Cereals (including rice) are the most important group of crops with more than 30% of total usable agricultural area.

Areas cultivated with cereals are estimated to have increased by 1,5% in 2007, in comparison to 2006. This increase is probably related to high prices on the cereal market. The total production of cereals in the EU is estimated at 281 million tonnes (+ 5,6% compared to 2006)8. Common wheat areas are estimated at 22 million ha (+0,7% compared to 2006), with France and Germany being the two largest producers (4,9 and 3 million ha respectively). Durum wheat has seen its acreage (3 million ha in 2007) decreasing by nearly 19% during the last 5 years due to the reduction in Italy and Spain and barley represents about 13,7 million ha. Grain maize areas are reaching 8,8 million ha (+3,2% in comparison to 2006). Romania is, within EU 27 MS, the third largest seed maize producer after France and Hungary.

The increased use of biofuel, and more particularly biodiesel in Europe, which is mainly produced using rapeseed, has led to an increase in the areas under rapeseed (+14% compared with 2006) to more than 6 million ha. In contrary sugar beet areas have continued to decrease (-2,9% in 2006).

Due to the reform of the sugar regime, sugar beet areas (less than 2 million ha) have decreased by 2,9% in comparison to 2006 and by 12,6% relative to 2002-2006 average.

The potatoes area represents 2,2 million ha (- 11,7% compared to 2003). Poland is, by far, the largest producer with an acreage representing 597 000 ha (766 000 ha in 2003).

Fodder areas from arable land represent 18 million ha mainly concentrated in France, Germany, Italy, Sweden and the UK.

Finally, in comparison, forest area represents about 25% of usable agriculture area (42 million ha).

[7] Eurostat databases, 2005 figures

[8] Eurostat, Statistics in focus. Agriculture and fisheries, 86/2007

Crop production - Land use in the EU 27 MS in 2005

	Arable land	Usable agricultural area	Forest area	Cereals including rice	Dried pulses in grain equivalent	Root crops	Industrial crops	Vegetables	Total of fruit crops (including wine and olives)	Fodder from arable land	Flowers and ornemental plants (including seets)	Seeds (vegetable, fodder, root and industrial crops other than oil seeds)
AT	1.379	3.263		796	43	*67*	*117*	12	16	243	0	1
BE	843	1.386	607	322	3	*154*	*42*	39	16	251	1	3
BG			3.609	1.725	13	*27*		35		112	4	
CY	129	172		62	1	*6*	*0*	10	40	28	0	
CZ	2.703	3.606		1.612	39	*103*	*423*	9		492	1	2
DE	11.903	17.035		6.839	169	*705*	*1.429*	120		1.805	6	33
DK	2.481	2.712	473	1.509	16	*92*	*112*	7	7	483	0	94
EE	590	834		282	4	*14*	*47*	2	11	207	0	3
ES	12.704	25.859	11.546	6.598	570	*241*	*641*	337		996	2	
FI	2.235	2.274		1.188	5	*60*	*105*	12		616	0	9
FR	18.375	29.588		9.176	438	*575*	*2.088*	226		4.491	8	63
GR	2.670	3.805	2.241	1.244	25	*68*	*422*	137		303	1	1
HU	4.503	5.863	1.775	2.934	22	*88*	*710*	85		301	1	11
IE	1.184	4.302		282	4	*50*	*4*	0	2	15	1	
IT	1.877	2.837	2.038	956	36	*98*	*119*	16	42	491	0	5
IT	7.744	14.710	10.070	3.979	72	*320*	*283*	448	2.451	1.999	8	14
LU	60	129	90	29	1	*1*	*5*	0		24	0	
LV	1.092	1.734	2.904	469	2	*62*	*77*	14	13	372	0	5
MT	9	10				*1*		2		5		
NL	1.099	1.924	349	222	4	*248*	*12*	69	19	448	27	28
PL	12.085	15.906		8.329	119	*916*	*617*	212	332	796	3	28
PT	1.257	3.786		370	18	*50*	*9*	39	:	394	2	1
RO	8.985	14.270	6.233	5.829	81	*337*	*1.221*	170	416	820	0	5
SE	2.687	3.201		1.013	31	*80*	*92*	18		1.043	1	13
SI	178	511	116	95	2	*12*	*8*	3	27	54	0	0
SK	1.357	1.941		800	17	*54*	*219*	10		241	0	2
UK				2.923	230	*355*	*570*			1.324		
Total	***100.127***	***161.657***	***42.052***	***59.581***	***1.964***	***4.784***	***9.370***	***2.031***	***3.391***	***18.353***	***67***	***321***

Source: Eurostat, 2005

Crop production - Harvested production of the main crops in 2006

	Cereals						Potatoes	Sugar beet	Rape	Fruits and vegetables					
	Total	Wheat	Barley	Grain Maize	Rye	Rice				tomatoes	carrots	onions	apples	pears	Orange
	1 000 t														
AT	4.460	1.396	914	1.472	94	*0*	*655*	2.493	137	39	77	100	509	117	0
BE	2.617	1.719	367	576	0	*0*	*2.593*	5.334	32	229	239	53	317	229	0
BG	5.513	3.302	546	1.588	13	*20*	*386*	25	22	212	13	20	26	0	0
CY	635	9	54	0	0	*0*	*125*	0	0	34	2	7	11	1	29
CZ	6.550	3.506	1.898	606	75	*0*	*692*	3.138	880	15	22	50	134	0	0
DE	43.484	22.428	11.967	3.220	2.644	*0*	*10.031*	20.647	5.316	53	504	337	857	0	0
DK	8.615	4.802	3.270	0	130	*0*	*1.361*	2.300	430	18	69	56	32	9	0
EE	619	220	303	0	18	*0*	*153*	0	85	1	10	0	4	0	0
EL	3.574	1.380	188	1.710	23	*181*	*855*	1.600	0	1.550	37	19	262	55	880
ES	19.080	5.576	8.318	3.461	159	*762*	*2.502*	6.873	9	3.680		1.151	660	590	3.210
FI	3.790	684	1.972		51	*0*	*576*	952	148	39	57	18	3	0	0
FR	61.750	35.432	10.404	12.853	122	*99*	*6.347*	29.765	4.131	750	614	337	2246	224	1
HU	14.674	4.379	1.081	8.441	95	*10*	*574*	22.271	331	204	84	95	537	33	0
IE	1.945	768	1.096	0	0	*0*	*0*	0	14	*0*	*0*	*0*	*0*	*0*	*0*
IT	20.260	7.092	1.282	9.671	9	*1.564*	*1.783*	14.156	6	6.357	640	361	2164	898	2.470
LT	1.856	810	742	5	90	*0*	*409*	640	171	1	33	8	75	0	0
LU	161	76	50	2	6	*0*	*16*	0	16	0	0	0	0	0	0
LV	1.159	598	307	0	117	*0*	*517*	456	130	1	32	14	34	1	
MT	0	0	0	0	0	*0*	*18*	0	0	16	1	7	0	0	1
NL	1.975	1.207	269	253	12	*0*	*0*	5.931	13	675	541	920	365	22	0
PL	21.776	7.060	3.161	1.261	2.622	*0*	*8.982*	9.696	1.584	247	833	590	2305	59	0
PT	1.167	260	94	536	25	*150*	*577*	319	0	*0*	*0*	*0*	240	169	228
RO	15.670	5.526	773	8.985	36	*19*	*4.016*	1.154	179	572	194	251	579	60	0
SE	4.181	2.001	1.112	0	118	*0*	*773*	2.189	223	18	101	*0*	19	2	0
SI	494	134	62	276	2	*0*	*107*	246	7	5	3	5	119	11	0
SK	3.133	1.342	642	838	30	*0*	*263*	1.371	260	36	13	13	31	1	0
UK	20.830	14.747	5.329	0	43	*0*	*5.815*	8.900	1.706	83	623	373	234	29	0
EU 27	***271.300***	***123.654***	***56.111***	***55.750***	***6.532***	***2.780***	***57.310***	***126.750***	***15.820***	***15.828***	***5.255***	***5.033***	***11.771***	***2.763***	***6.820***

Source: Eurostat
Note: "0" (zero in Italic) should be understood as data not available

2. The EU on the global seed market

World seed sector overview

Although the seed industry is crucial for modern agriculture, worldwide total sales and profits are not as large as for other agricultural inputs, such as pesticides, machinery or fertilizers.

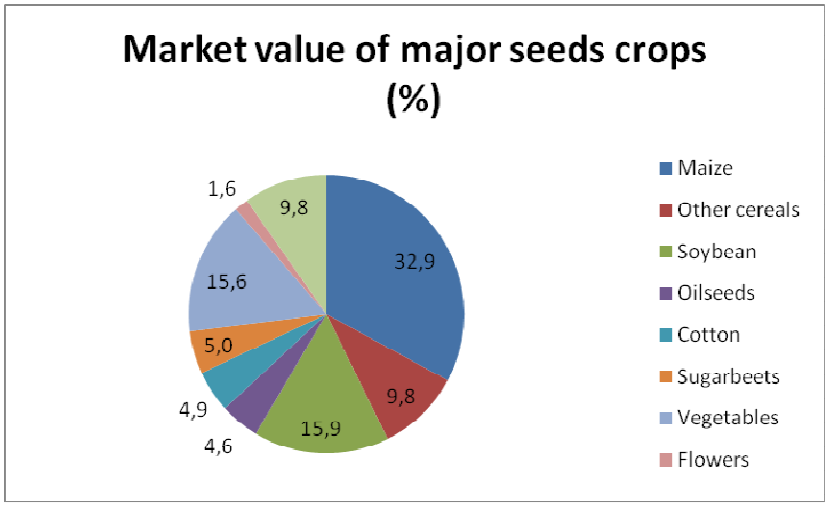
The global commercial seed market place, which continues to experience a robust growth, approached a value of $24 billion USD in 2006[9]. The Context Network estimates that the 2006 proprietary part of the global commercial seed market value has reached $19,6 billion USD, an increase of nearly 40% over 2001 estimates.

Putting these figures in perspective, the seed sector turnover represents 30% of the yearly turnover of Nestlé (CHF 107 billion Swiss Francs in 2007) and the turnover of the biggest seed company (Monsanto, $ 7,5 billion USD) is just comparable to the net profit of BASF (4,1 billion Euros).

The following table gives an overview of the estimated size of the 2002-03 internal market for seed and other planting material for 49 countries, with a total estimated internal market of about 25 billion USD.

Corn and soybean, representing nearly 50% of the global seed market, are from far the two largest seed crop markets as showed on the following graph presenting data from 2006.

Market value of major seeds crops (%)



Source: USDA, GAIN report E47001

[9] Source : International Seed Federation (ISF)

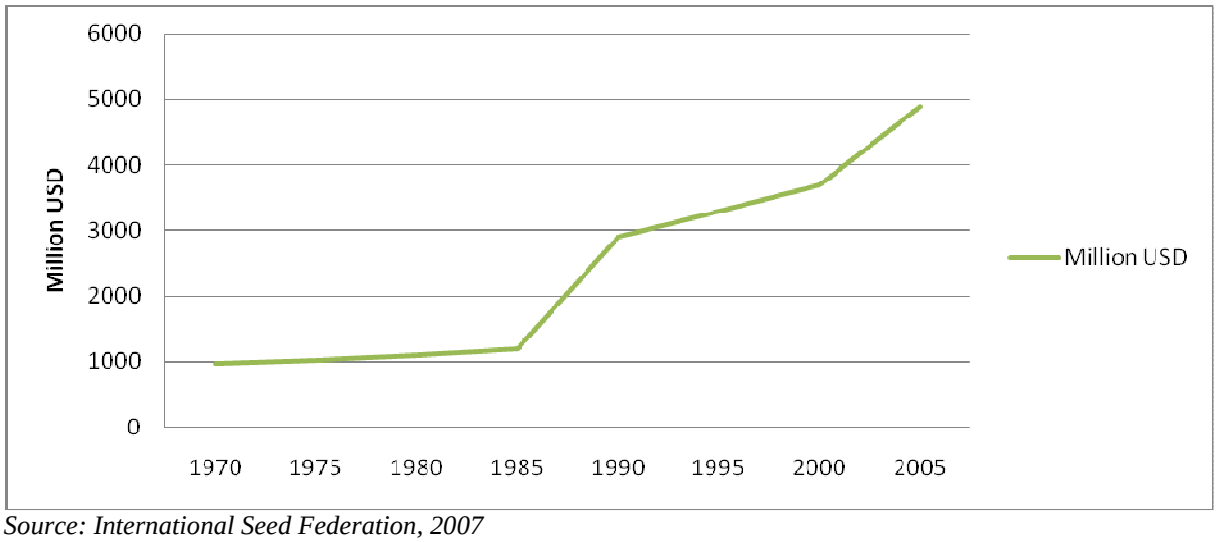
2003 estimated size of the internal commercial market for seed and other planting material of selected countries (in USD million)

Country	Market size (USD million)	Country	Market size (USD million)	Country	Country size (USD million)
USA	5.700	Hungary	200	*Finland*	*80*
China	3.000	Denmark	200	*Paraguay*	*70*
Japan	2.500	Sweden	200	*Ireland*	*60*
CIS	2.000	Austria	170	*Portugal*	*60*
France	1.370	Turkey	170	*Bangladesh*	*60*
Brazil	1.200	Morocco	160	*Colombia*	*40*
Germany	1.000	South Africa	150	*Bolovia*	*35*
Argentina	930	Czech Republic	150	*Peru*	*30*
Italy	650	Greece	140	*Zimbabwe*	*30*
India	600	Egypt	140	*Slovenia*	*30*
United Kingdom	570	Belgium	130	*Saudi Arabia*	*18*
Canada	550	Chile	120	*Zambia*	*15*
Poland	400	Nigeria	120	*Ecuador*	*12*
Mexico	350	Kenya	100	*Malawi*	*10*
Spain	300	New Zealand	90	*Dominican Rep.*	*7*
Netherlands	300	Slovakia	90		
Australia	280	switzerland	80		
				Total	***24 667***

Source: International Seed Federation (The data provided in this table are for 2003 for most countries).

Traditionally, the seed markets were national markets with quite a low volume of international exchanges. This has changed during the last 20 years. The seed trade is estimated to have more than tripled between 1970 and 1994, and quadrupled between 1985 and 2005.

Evolution of seed exchanges worldwide



Source: International Seed Federation, 2007

EU production and trade in seed

The European Seed Association (ESA) estimates that the EU commercial seed market value has reached approximately in between 6,5 and 7,1 billion Euros and represents more than 20% of the total worldwide market for commercial seed. USDA estimates the EU market size for planting seeds at $ 6,1 USD million[10].

The EU is the largest exporter with an estimated export value of 2,7 billion Euros representing more than 60% of the total worldwide export value of 4,9 billion Euros.

This evolution is quite unique in the agri-business sector especially when we compare the European seed market evolution with the pesticides market (PPP), which are today quite equivalent at about 6.5 billion Euros (PPP market value estimation at 6 769 million Euros in 2004 by ECPA).

The EU market for agrochemicals has been relatively flat during the last 15 years. In 2004, the global PPP market was valued at 24 734 million Euros, the European area market share amounted to 6 769 million €, or 27,4 % of the total[11]. The EU market for agrochemicals is in a transition phase because of legislative and structural changes due to the reform of the Common Agricultural Policy (CAP), and because of individual government legislative measures to cut usage.

In comparison, there is still an important potential on the international market for improved seed. Several sources indicate an annual growth rate of about 5% for field crops at global level, based on the following major growth drivers:

- It is widely believed that only one-third of global seed consumption is commercially traded;
- Crops consumption is expected to grow. In the OECD-FAO agricultural outlook 2007-2016, worldwide wheat consumption is estimated to grow by nearly 10% by 2016 due to key economic factors such as population growth, rising income in developing countries inducing meat consumption increase, increased demand for higher value foods, and yield growth;
- Emerging economies of China, India, Brazil and Russia;
- Assumptions related to evolving biofuel production.

In 2006/2007, EU grain seed production was anticipated to increase due to the reasons mentioned above. Because of the increased acreage for grain seed production, EU grass seed production was expected to decline in 2007. Currently the market for grass seeds is in an oversupply situation.

The EU became a net exporter of planting seeds in 2002/2003, and its trade surplus has gradually increased since then to $ 300 USD million in 2005/2006 as summarized on the following graph. Both EU Imports and EU exports evolutions are related to a strong increase of exchanges in vegetable seeds.

[10] USDA Foreign Agriculture Service. GAIN report E47011-2007

[11] ECPA, Annual Report 2004-2005

Total EU trade for seeds for sowing (in USD million)

Source: USDA – Foreign Agriculture Service GAIN report E47011

Seed production areas in EU 27 MS for most important agricultural crops

Country	TOTAL		---Of which																	
			Wheat		Barley		Grasses		Potato		Sugar beets		Maize		OSR		Sunflower		Flax	
	area	%	area	%	area	%	area	%	area	%	area	%	area	%	area	%	area	%	area	%
										in thousand ha										
AT	30	1,70%									0,2	2,35%	5,3	4,42%						
BE	18	1,02%																	4	20,00%
CZ	130	7,36%	45	10,71%	30	10,34%	16	7,27%												
DK	150	8,49%	23	5,48%	33	11,38%	75	34,09%												
FI	35	1,98%					9	4,09%												
FR	290	16,42%	82	19,52%	35	12,07%	22	10,00%	15	13,27%	4,5	52,94%	54	45,00%	8,3	41,50%	9	30,00%	11,25	56,25%
DE	200	11,32%	60	14,29%	40	13,79%	32	14,55%	16	14,16%					6,3	31,50%				
GR	3	0,17%																		
HU	90	5,09%	32	7,62%	12	4,14%	5	2,27%					25	20,83%	1,2	6,00%	2,7	9,00%		
IE	10	0,57%																		
IT	190	10,76%	23	5,48%	13	4,48%					3,5	41,18%	4,5	3,75%			2,5	8,33%		
NL	65	3,68%					20	9,09%	36	31,86%									3	15,00%
PL	80	4,53%	20	4,76%	13	4,48%	12,5	5,68%	7	6,19%					1,35	6,75%				
PT	2	0,11%																		
RO	160	9,06%											15	12,50%			6	20,00%		
ES	40	2,26%			20	6,90%											6	20,00%		
SE	60	3,40%					9	4,09%												
UK	80	4,53%	36	8,57%	25	8,62%	6	2,73%	15	13,27%					0,9	4,50%				
BU	40	2,26%															2,2	7,33%		
CY	4,5	0,25%																		
EE	6	0,34%																		
LT	18	1,02%																		
LV	10	0,57%																		
LU	3	0,17%																		
MT		0,00%																		
SI	2	0,11%																		
SK	50	2,83%																		
Others			*99*	*23,57%*	*69*	*23,79%*	*13,5*	*6,14%*	*24*	*21,24%*	*0,3*	*3,53%*	*16,2*	*13,50%*	*1,95*	*9,75%*	*1,6*	*5,33%*	*1,75*	*8,75%*
Total	*1766,5*		*420*		*290*		*220*		*113*		*8,5*		*120*		*20*		*30*		*20*	

In 2006, the EU 25 MS production of cereals seeds was estimated at 8,9 million MT (and was anticipated to increase in 2007 due to the current high grain prices. France, Spain and Germany are the top 3 largest European producers of cereals seeds; and the production of these 3 countries represents nearly 40% of the total EU 25 MS volumes.

In 2007, production of rapeseed for sowing was expected to increase due to the demand for rapeseed as a feedstock for biodiesel in the EU. France and Germany are the 2 main producers.

Largest maize seeds producers are France, Hungary and Germany with respectively 21%, 17% and 13% of total EU 25 MS volume production.

The main producer of grass seeds is Denmark with about 110 000 MT[12], followed by Germany, the Netherlands and France with a production of each between the 25 000 and 40 000 MT.

Vegetable seeds are mainly produced outside the EU in a wide range of countries in which labour costs are not as high as in the EU. The produced seeds are shipped to the EU, especially to the Netherlands, for treating, sampling and packaging and re-exported to their final destination in the EU or outside the EU.

EU 27 MS 2006 seed market value (in USD million)

Country	Domestic Commercial Seed Market	Seed Exports (2006)		Seed Imports (2006)		Balance (2006)	
		Agricultural Seed	Vegetable Seed	Agricultural Seed	Vegetable Seed	Agricultural Seed	Vegetable Seed
	$M USD (estimations)						
Austria	100	66	2	52	7	*14*	*-5*
Belgium	126	120	4	172	28	*-52*	*-24*
Bulgaria	NA	11	1	30	5	*-19*	*-4*
Czech Republic	200	29	5	54	5	*-25*	*0*
Denmark	170	216	40	43	11	*173*	*29*
Estonia				3	1	*-3*	*-1*
Finland	103			15	5		
France	1.915	590	200	275	78	*315*	*122*
Germany	1.000	360	33	251	50	*109*	*-17*
Greece	160	13	3	69	18	*-56*	*-15*
Hungary	200	137	8	77	14	*60*	*-6*
Ireland	60	4	0	28	4	*-24*	*-4*
Italy	670	89	58	161	111	*-72*	*-53*
Latvia		0	2	8	1	*-8*	*1*
Lituania		7	1	15	3	*-8*	*-2*
Luxemburg		5	0	6	0	*-1*	*0*
Malta				0	1		
The Netherlands	208	182	641	138	180	*44*	*461*
Poland	260	48	3	98	38	*-50*	*-35*
Portugal	60	4	4	38	13	*-34*	*-9*
Romania	120	26	0	34	7	*-8*	*-7*
Slovakia	90	21	0	33	3	*-12*	*-3*
Slovenia	30	4	1	17	4	*-13*	*-3*
Spain	300	45	29	139	147	*-94*	*-118*
Sweden	155	40	3	26	7	*14*	*-4*
UK	257	55	25	130	43	*-75*	*-18*

Source: International Seed Federation, 2006

It must be noted that these figures have been crossed with multiple sources (ESA, USDA, and Global Trade Atlas) and, as mentioned in Table 5, should be considered carefully as frequent variations of minimum +/- 10% have been observed.

12 USDA – GAIN report DA6005

The major players in the seed market

The world top-ten seed companies

For several decades after plant breeding emerged as a recognized field of science in the late 19th century, almost all plant breeding activities took place in public institutes with a gradual shift of breeding activities to the private sector during the 20th century. This may explains why plant breeders (public first and then public & private) have been largely involved in the development of national regulatory frameworks.

The seed industry matured due to the introduction of hybrids, especially hybrid maize in North America, hybrid sugar beet in Europe, and hybrid vegetables in South East Asia. In North America and Europe, the hybrid seed industry grew from regionally based family businesses. The profitability of hybrids far outstripped that of non-hybrid open pollinated seeds. This leads to eventual consolidation in the industry and the dominance of several key companies in particular crops. In the 1970s, these high margins attracted the attention of several agrochemical companies, waiting to exploit possible synergies of the seed business with their own line of business (e.g. the acquisition of Northrup King (USA) by Sandoz (Switzerland).

The emergence of biotechnology in agriculture in the 1980s has led to a complete reorganization of the sector. Today, leading seed groups are largely owned or allied with the world leading chemical/plant protection companies. Consolidation through mergers and acquisitions took place in major field crops, and is currently ongoing in the vegetable sectors. Chemicals companies' interests in investing in biotech are linked to the fact that many pesticides used in agriculture may be replaced by transgenic crops that have a biologically inbuilt resistance.

In 1996, the top 10 seed companies were representing about 37% of the worldwide market; in 2004, the top 10 accounted for nearly 50% of the worldwide-certified seed market[13]. Monsanto, the actual market leader was not present in the top 10 in 1996.

World Top 10 seed companies based on 2006 seed revenues

Company	Country	Seed sales (2006) $ USD million
Monsanto	USA	$ 4,028
DuPont (incl. Pioneer)	USA	$ 2,781
Syngenta	CH	$ 1,743
Limagrain	FR	$ 1,035
Land O'Lakes	USA	$ 756
KWS AG	DE	$ 615
Bayer CropScience	DE	$ 430
Delta & Pine Land	USA	$ 418
Sakata	JP	$ 401
DLF-Trifolium	DK	$ 352

Source: ETC Group.

These figures hide the large segmentation according to both categorical product lines and geography. About vegetables, to the exception of the companies Seminis and Sakata, the other top 10 players are

[13] Source : ETC 2006 report

based in Europe and mainly in the Netherlands. Regarding sugar beets, top players are also based in Europe (KWS, Syngenta, Strube-Dieckmann) whereas soybean seed market leaders (Monsanto, DuPont) are based in the USA and in South America (EMBRAPA, Nidera).

The structure of the EU seed companies

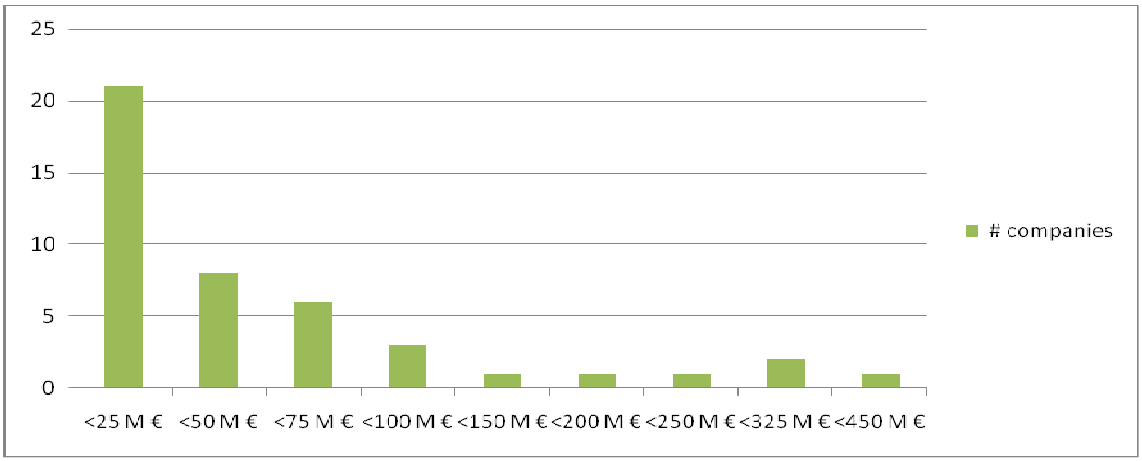
The European seed sector is, also, characterized by a large segmentation (from national SMEs involved in cereals or ornamentals only to international companies with a multi-crops approach).

S&PM is not one sector but several sectors in constant evolution, which are becoming more and more specific in terms of type of products, type and number of actors, competitiveness, product life cycle, R&D efforts, added value and return on investment.

The leading Europe based seed companies are Syngenta and Limagrain and they are, as well as the major American companies mentioned above, operating worldwide.

In 2005, ESA statistics indicated that 21 companies, out of 41 ESA individual members, have an annual turnover of less than 50 million Euros while the 3 largest companies have a turnover of more than 250 million Euros each. These statistics show that the EU seed sector is still made of a majority of small and medium size companies.

Breakdown of ESA individual members based on their annual turnover



Source: European Seed Association, 2005

As mentioned above, industry consolidation that started about 15 years ago happened in field crops areas. Genetic material, biotechnologies and their associated Intellectual Property Rights (IPRs) have been in fact leading to a new restructuring of the relations between agrochemical, biotech, food processing, and see companies. Plant breeding, considered in the past as a '*secret*' and '*non-scientific*' activity, is moving to a high-tech industry involving more and more trans-national companies. This consolidation has created a visible break between biotech-in and biotech-out companies.

In the EU15 MS, the number of employees in the private seed sector amounts to around 30 000. The business personnel involved in R&D (plant breeding) are around 5 000 and these are working in around 600 major research stations.

The existence of a plant breeding capacity is a precondition for the release of well-adapted plant varieties suited to the growing conditions, resistant to pests and diseases, with the quality requirements that the food and feed industry requires.

We observe 2 major groups of breeders as follows:

- The SMEs that are used to breed for their local/national markets and to develop partnerships with foreign seed partners for the purpose of testing/positioning and, when relevant, for the marketing of their existing cultivars in other countries characterized by specific growing conditions (breed locally - test globally);

- Larger companies whose breeding strategy is mainly a wide European and/or a global approach (e.g. maize) and consists in breeding for a given Area Of Adaptation (AOA), which could be defined as an area where agro-climatic and plant growing conditions are uniform (breed globally – test locally).