

1. INTRODUCTION

1.1 What is the name of your organisation?

CLAUSE CLAUSE SA in France is specialized in Vegetable Seeds. CLAUSE is the heir company of TEZIER created in VALENCE –FRANCE in 1785 and CLAUSE created in PARIS-FRANCE in 1891. As subsidiaries of Vilmorin & Cie, CLAUSE and HARRIS MORAN of MODESTO-CALIFORNIA are pooled in the same HMClause Business Unit which is the fourth largest vegetable seed company in the world, and creates vegetable seeds with high added value for professional vegetable growers around the world. The Company is based in PORTES-LES-VALENCE – FRANCE and is established in 15 countries on five continents. The Company is actively engaged in supporting the UPOV 91 Convention and promotes free access to genetic resources for breeders through the so-called “breeders exemption”. (Located in Portes lès Valence, France).

1.2 What stakeholder group does your organisation belong to?

Breeder of S&PM; Supplier of S&PM; International company

1.2.1 Please specify

1.3 Please write down the address (postal, e-mail, telephone, fax and web page if available) of your organisation

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2. PROBLEM IDENTIFICATION

2.1 Are the problems defined correctly in the context of S&PM marketing?

No

2.2 Have certain problems been overlooked?

Yes

2.2.1 Please state which one(s)

Complexity and fragmentation of legislation - Complexity of legislation is mainly due to the overlapping of various directives. Nevertheless, it also reflects the biological diversity of species and markets involved as well as different relationship with end users. Segmentation according to species is necessary but an overall total harmonization of the implementation of the system without discrepancies across all MS is needed. - DUS is not uniformly implemented for each species in all the MS. - Better consistency should be achieved between S&PM law and Plant Health law: classification of pests & diseases (Regulated or Non-regulated quarantine /deregulated pests and diseases on seeds in line with IPPC criteria). Level of administrative burden ? Reduction of the burden should not be the main goal but to render it more consistent, cost efficient and optimized. ? The improvement of synergy between MS in sharing Tasks: e.g. automatic recognition of DUS between MS, use of common database and reference collection, mobilization of public and private capacities (fields and labs...) should help to optimize. ? At EU level, technical quality in some official examination offices is not always cost effective and contrary to the objective of an integrated seed sector, strong and competitive corresponding to the agricultural and food chain needs. ? The impact of environmental criteria added to the existing ones is not mentioned as increasing costs. ? Restructuration and rationalisation of the system is a prerequisite before thinking of a transfer to private sector which could bear, to some extent, the burdens delegated under official supervision from public authorities. Otherwise the private ability to perform innovation could be affected. Distortions on the internal market ? The functioning of the common catalogue is not taken into account: delays and access modalities are inconsistent (e.g. fees vary upon MS). ? Protocols are not technically implemented in the same manner for each species in the different MS. ? Harmonization in implementing the current system in all MS

should be a 1st objective due to increasing number of MS, which does not mean triggering a complete change of the system but to achieve a robust framework, in respect of other policies and objectives of general interest pursued by E.U. Sustainability issues ? The current regulation already takes into consideration sustainability criteria: e.g. in vegetable the pests and diseases resistances and the adaptation of varieties for new economical itineraries and better crop management. ? This survey does not provide with a clear definition of sustainability which should not be opposed to productivity. In particular, the need to improve, or at least to maintain, productivity and quality whilst reducing resources uptake and intrants should be emphasized. See references listed in §7.2.

2.3 Are certain problems underestimated or overly emphasized?

Underestimated

2.3.1 Please indicate the problems that have not been estimated rightly

Underestimated: - The support of a robust S&PM law for recognition of the value of genetic innovation by plant breeding and marketing of new varieties. - The role of seed for food supply and quality not only in EU but at worldwide level. - The need of a sectorial approach corresponding to specificities of species groups. - The international playing field of the vegetable seed sector: EU is the global leader and the first exporter in the world. - The cultural dimension of vegetables as a food product that impacts breeding goals more than any other set of parameters. - The complexity in the definition of sustainable criteria. Overestimated: - The consolidated burden of registration and controls of lots in comparison of what it could be.

2.4 Other suggestions or remarks

General remarks: - Flexibility and Speed up of the registration process was not mentioned in the scenarios (e.g. marketing in advance procedures, two DUS cycles performed in one year, for almost all vegetable species in France). - Contribution of the plant breeding to the conservation and enrichment of genetic diversity is not recognized. - Integration of the duration (long term process) of plant breeding towards gain and progress objectives in particular the sustainability ones. §2.4 - 2nd bullet point ('the provisions contained in the EU S&PM ...'): - The link between innovation and the development of low input varieties is somewhat restrictive and not correctly assessed. Innovation also exists concerning that issues; moreover, examples exist where adapted solutions have been already implemented (e.g. Introduction of environmental criteria in the DUS: earliness, pests and diseases resistances ...for vegetables).

3. OBJECTIVES OF THE REVIEW

3.1 Are the objectives defined correctly in the context of S&PM marketing?

No

3.2 Have certain objectives been overlooked?

Yes

3.2.1 Please state which one(s)

- 'Self-reliance of food and feed supply within the EU by productivity, quality and consistency of crop productions' is not mentioned. - 'Enhancing of productivity combined with a sustainable agriculture' is not clearly indicated. - 'Food safety and quality in EU through productivity' has not been included as a general policy objective, while S&PM is at the origin of every food pathway. As stated in the report, the current S&PM legislation has placed EU seed production and export to a world leader rank and any changes will have global consequence worldwide: therefore, the objective of the revision is to continue to foster, support the plant breeding and seed industry competitiveness. Valorisation of genetic progress turned towards social and economic objectives of the whole downstream chain must be fostered by the revised regulation; Productivity, food safety, sufficient quality of S&PM must remain the focus of the EU regulations. Also lacking : - New requests for food and feed qualities and human health, - Consistency with the principles of E.U and other E.U legislation: Plant Health law, Variety Protection regulations..., - Compliance with international rules of trade because Europe is the first exporter of seeds. (OECD...). Some

of the operational objectives have been completely overlooked in the rating table (§6.2): horizontal framework, enhanced level of information provided by the common catalogue, market transparency & traceability of operators, EU influence on int'l standards.

3.3 Are certain objectives inappropriate?

Yes

3.3.1 Please state which one(s)

The specific objective (3.2, bullet point 2) to improve farmer's choice and access to wide diversity of plant varieties is inappropriate: it is not a target per se; the objective should be to bring to the farmers a choice of the best varieties for their individual needs.

3.4 Is it possible to have a regime whereby a variety is considered as being automatically registered in an EU catalogue as soon as a variety protection title is granted by CPVO?

No

3.5 If there is a need to prioritise the objectives, which should be the most important ones? (Please rank 1 to 5, 1 being first priority)

Ensure availability of healthy high quality seed and propagating material

1

Secure the functioning of the internal market for seed and propagating material

2

Empower users by informing them about seed and propagating material

4

Contribute to improve biodiversity, sustainability and favour innovation

3

Promote plant health and support agriculture, horticulture and forestry

5

3.6 Other suggestions and remarks

From our point of view, all these objectives are a number one priority. As stated in the report, all the general policy objectives contribute to the general goals of supporting agriculture, horticulture and promote plant health (§ 3.1 bullet point 4). All the general policy objectives must contribute to a more competitive and intensive agriculture ecologically sustainable by rational use of new rustic varieties combined with improved crop systems, aiming to food safety and quality sufficient supply.

4. OPTIONS FOR CHANGE

4.1 Are the scenarios defined correctly in the context of S&PM marketing?

No

4.2 Have certain scenarios been overlooked?

Yes

4.2.1 Please state which one(s)

In our opinion None of the scenarios is fully in line with the global objectives and None of them is acceptable as such. Scenario 2 - Delegation to private sector under official supervision is a positive step, which could provide opportunities to optimize costs. - However, this scenario does not proposed sufficient standardization of registration process, where there is a lack of harmonization: is leading to market distortion, to the lack of information/traceability for users and does not foster innovation enough. - Precisions are needed as regard the list of "other regulated species" Scenario5 - Some centralization is appropriate. For example for DUS, where one report

per variety should be sufficient in any Member State as well as for variety protection. - However, VCU should take into account the specificities of each agricultural sector and therefore needs to be more flexible; VCU for vegetable is clearly irrelevant and technically not implementable because of the various market sizes and multiple segments of use, many of them in out-of-the-EU markets. Specific relationships between seed suppliers and users with a direct feedback on the performance of the proposed varieties make VCU unnecessary. Without VCU the EU vegetable routinely delivers the highest level of seed identity purity, germination, vigor and seed health of any seed sector. VCU applied to the vegetable seed sector would threaten it economically, with unnecessary burdens and costs, which would affect its activity and its capacity for innovation. Its competitiveness would be dangerously weakened not only at EU level, but at international level as well.

4.3 Are certain scenarios unrealistic?

Yes

4.3.1 Please state which one(s) and why

Scenario 1 - It only answers to objective of "costs reduction" and does not fulfill any other objective. - Moreover, impact of transfer of costs to the private sector is not analyzed or quantified. Scenario 3 - This scenario does not propose sufficient standardization for implementation of registration process across all MS, where there is presently a lack of harmonization. - Risks of introducing discrepancies with market distortions and non-fostering of innovation. - Exclude ornamentals which we support but, what happens with ornamentals in the other scenarios? Scenario 4 Goes against the general objectives of competitiveness and innovation; It could lead to downward spiral with: - High risks for plant breeding and the seed industry, - Presents risks of degrading the overall quality of the varieties on their traits, with in particular negative influence on plant health, - Introduction of market distortions with a confusing multi-level system and due to the enforcement of low costs seeds, - Short termism by processors and distributors, incompatible with long term performing of plant breeding: market drivers having a short term view that would distract from quality requirements, with increase prices, to the detriment of consumers. - VCU for Vegetables in the path of tested varieties is technically inapplicable and irrelevant. - Presents a risk of negative impact on international trade as a negative model for standard-setting at the international level.

4.4 Do you agree with the reasoning leading to the discard of the "no-changes" and the "abolishment" scenarios?

Yes

4.5 Other suggestions and remarks

5. ASSESSMENT OF OPTIONS

5.1 Are the impacts correctly analysed in the context of S&PM marketing?

No

5.2 Have certain impacts been overlooked?

Yes

5.2.1 Please state which one(s)

Impact on users (farmers, processors, distributors and consumers): It is surprising that the impact on users have not been assessed whilst both general and specific goals insist on better information to users. Therefore, our answer below this takes into consideration this additional aspect.

5.3 Are certain impacts underestimated or overly emphasized?

Overestimated

optimized Impact on competitiveness, markets, trade and investments flows
VV x This scenario introduces competitive distortions between breeders (and MS) depending on their capacity to finance DUS testing. No real standardization of registration process across MS Impact on innovation and research
V x Reduction of resources for R&D and no fostering of plant breeding effort Environmental impact
-- x The report states that scenario could lead to less resistant varieties being marketed with more plant phytosanitary products Impact on users (added) x
No real improvement on harmonization and less of performing varieties Scenario 4: General comment Goes against the general objectives of competitiveness and innovation; It could lead to downward spiral with a confusing multi-level system Areas
SANCO impacts rating CLAUSE impacts rating Comments Impact on plant health and quality of S&PM x xx Because of lack of testing and checking it induces risks on the effective resistance of the varieties against pests & diseases and by the same on the plant health Impact on employment and jobs
xx xx Impact on administrative burden and costs for authorities VVV
VV Still needed for the part of tested varieties Impact on administrative burden and costs for private sector operators VVV xx There will, be a greater burden if vegetables are to be tested for VCU Impact on competitiveness, markets, trade and investments flows VV xx In this scenario, we expect varieties of lower quality to be introduced into the market, leading to a negative spiral on quality , value and confusion Impact on innovation and research V
x As regards of a market confused and disorganized there will be less incentive for innovation and plant breeding. Environmental impact
V x The positive rating is explained by the fact that environmental criteria will be mandatory. However, with optional DUS, it can be expected that there will be less progress on this objective. Impact on users (added)
xx In the impact assessment, scenario 4 is given a neutral score on information to farmers. It is expected from the analysis that increased flexibility should allow more rapid access to market. However, if untested varieties are used we expect a negative impact on users as no reliable information on the characteristics of the varieties will be available. Scenario 5: General comment Some centralization is appropriate but some provisions need review Areas
SANCO impacts rating CLAUSE impacts rating Comments Impact on plant health and quality of S&PM V V Impact on employment and jobs x x
Impact on administrative burden and costs for authorities VV
VV Impact on administrative burden and costs for private sector operators V
xx VCU for vegetable is clearly irrelevant and technically not implementable and invalid. Considering the very high level of segmentation, it would induce an additional heavy burden. Impact on competitiveness, markets, trade and investments flows VV
V Implementation of uniform rules of seed regulation across MS Impact on innovation and research V V
Environmental impact --
-- Impact on users (added) V
Ensure transparency in the procedures and on characteristics of varieties in order to deliver impartial and reliable information permitting to user a wide choice free and informed.

5.4 How do you rate the proportionality of a generalised traceability/labelling and fit-for-purpose requirement (as set out in scenario 4)?

5 = not proportional at all

5.5 How do you assess the possible impact of the various scenarios on your organisation or on the stakeholders that your organisation represents?

Scenario 1

Rather negative

Scenario 2

Fairly beneficial

Scenario 3

Rather negative

Scenario 4

Very negative

Scenario 5

Fairly beneficial

5.5.1 Please state your reasons for your answers above, where possible providing evidence or data to support your assessment:

See detailed comments in Question 5.3

6. ASSESSMENT OF SCENARIOS**6.1 Which scenario or combination of scenarios would best meet the objectives of the review of the legislation?**

A combination of scenarios

6.1.1 What are your views with regards to combining elements from the various scenarios into a new scenario?

The CLAUSE scenario integrates the following elements (A combination of scenarios as well as new features) : A EUROPEAN CATALOGUE, registering decisions taken by the public authorities and based on: - national application - a unique and mandatory DUS valid for all Member States o observed during 2 growing cycles o performed by public and or private testing stations accredited by CPVO (scenario 5) o partly carried out by private breeders under official supervision (scenario 2) o private operators should always have the choice between delegation under official supervision and official testing(scenario 2) o automatic recognition of DUS between MS (new feature) o harmonization of protocols listing /protection with CPVO(new feature) - No VCU for vegetable crops, but DUS including the main characteristics leading to sustainable agriculture (scenario 2) (1) - Progressive and rational introduction of new criteria, especially those linked to environmental or food quality and health issues, in DUS (already implementable in scenario 2). - Variety denomination centralized at the CPVO, with online web tools (scenario5). Standard (2) or Certified Seed controls: - Supervision of seed quality as standard or certified categories depending of the choice of operator, achieved through a delegation of tasks to the seed industry under official supervision (scenario2 and scenario 5) - Harmonization within an international scheme (OECD...) The possibility to market varieties in advance of listing for trial purposes (existing provisions for orange labels) Registration of accredited operators with an obligation to follow standard protocols Specific provisions should continue to be applied for ornamentals (scenario3) and for non-professional varieties (scenario 2) provided that this category is well defined, with minimum official measures to control seed health, as well as a genetic identity. Concerning governance, there needs to be open consultation with the downstream sectors concerning regulation and longer term objectives, which means a dialogue between the public and private sectors. (1) See the attached doc Sustainable DUS for Vegetable below

VCU testing is not needed for vegetables. The structure of the market in the case of vegetables is very different from the market structure for agricultural crops. The relationship between the supplier and the growers is direct, making it possible for the customer to receive first-hand information on the performance and quality of the specific variety and to give direct feedback to the supplier with a direct private marketing network. It implies that there is no real need for an official system which generates the same set of data in respect of all varieties in order to provide objective information to the customer. Also having regard to the fact that the market of vegetables is very much segmented (e.g.50 for tomato or 20 for lettuce...) with the different users (professional, semi-professional,

home gardeners) and many agro-climatic slots and opportunities of use (different typologies of products, with domestic or international markets, fresh or industry uses..) so it is not even possible to define a set of criteria for performance testing. Last but not least the dimensions of production are also very different meaning that while in case of agricultural crops it amounts to millions of hectares, for vegetables it means "only" thousands of hectares. This element is relevant regarding the impact the production has on environmental and other elements. DUS can provide a profile of varieties for their response to certain environmental factors .It enables an appropriate choice, diverse and focused of varieties for their use. Some new criteria will be pertinent with a positive and sustainable impact for environment and human health: Examples of how variety characteristics can be focused on sustainability: GHG efficiency: Earliness and good ability of varieties for growing and production under sub optimal conditions (short length of days, low light and low temperatures) with a particular physiology and plant architecture reduces significantly the consumption of fossil energy (gas / oil). During the last thirty years, the need to produce lettuce under greenhouse has been divided by a factor ten with a global positive impact on environment. Such improvement is also observed with the use of rootstocks to enhance the global vigor and yield per square meter of the plants (tomato, pepper, eggplant, melon, watermelon...) with a limitation of acreage. Reduced use of pesticides: 50% of the breeding effort is devoted to introduce pests and diseases resistances including more than 150 host plant/pathogens couples on 36 vegetable species. The reduction of use of pesticides can be estimated at 25% during the last twenty years with an objective of 50% in the next 10 years. A lot of monogenic resistances have been used but now the strategy (supported by research programs) is to introduce more sustainable resistances in the varieties: cumulative single genes or oligogenic/ polygenic and quantitative resistances with assistance of molecular markers. In certain cases some crops are achieved without use of any chemical treatment with resistant varieties combined with biological control (e.g. tomato, pepper, eggplant under greenhouse in Netherland, France, Northern Europa, and Spain...) The breeding and use of rootstocks issued from wild accessions with a lot of soil borne diseases resistances confers resistances to grafted cultivars and prevents from use of chemical soil disinfection. Another pathway in prospectation will be the induction in the plants of Natural Defense Systems which could be genetically controlled and selected in new varieties. The introduction of genetic mutations for herbicides resistances will permit the targeted and limited use of some biodegradables molecules with a much reduced quantity (case of endive). Nutrient use efficiency: For itineraries of intensive vegetable crops, systems of accurate local fertilization combined with drip irrigation following the real needs of the plants and depending of its physiological stage are now effective with a computer monitoring: these crop management systems request for specific genetically adapted varieties in order to optimize the use of this concept. Organic production: this new type of production is asking for rustic varieties including pests and diseases resistances and is driving specific breeding programs. Qualitative Chains: the consumers are more and more asking for an improvement of organoleptic (flavor and savor) and or nutritional qualities of the vegetable. Some breeding programs are currently developed to improve the qualities of the harvested products in order to improve welfare and health of consumers. These characteristics should be established and recognized when varieties will be officially registered. Conservation and enhancement of Biodiversity: Catalogue Official services have impulsed in France the setting up networks of conservation of genetic resources since several years and in line with the ITPGRFA. It has been achieved with the opening of lists of varieties for amateurs and then following the directive 2009/145 providing certain derogations for acceptance of landraces and local varieties threatened by genetic erosion and vegetable varieties with no intrinsic value for commercial production, the conservation varieties and the heritage varieties for home gardeners will be embedded in two lists with geographic or quantitative restrictions and with adapted criteria (or simplified procedure) for official registration. This will be a major contribution to the maintenance in good quality conditions with post control of about 500 varieties in France either for local production by small farmers and for home gardeners with heritage varieties. (2) See the attached doc Controls of lots: a vegetable seeds perspective below. Assurance of seed quality supplied to the market. The number of vegetable varieties marketed in the EU is very high (> 19.000 in the Common Catalogue for Vegetable Varieties). The number of vegetable seed lots from seed production and seed conditioning (sizing, treating, packing, etc.) is strongly related to the large number of

varieties. Additional factors are the need for spreading of risk to produce seeds of a variety in multiple locations and the fact that for some (hand-picked) crops seeds are harvested in multiple pickings (e.g. tomato, pepper). This results in a very large number of commercialized seeds lots, varying in size, depending on crop and variety, from several thousands of kilos (e.g. peas, spinach) to several hundreds of grams (e.g. lettuce, tomato). Production of vegetable seeds for the EU market is mainly done in 3rd countries outside the Community, by specialized Vendors (under supervision of the EU seed company), or by affiliated companies under direct control of the EU seed companies. In all cases basic seeds or parent lines for multiplication are provided by the EU seed breeder. Besides phytosanitary inspections, in general there is no official inspection of varietal identity or varietal purity of vegetable seed production by the Inspection Authorities of 3rd countries. The European Vegetable Seed Industry has agreed and published minimum standards for so called 'precision seeds', which are supplied to the professional market (see; <link to ESA website>). These voluntary industry standards are well above the minimum levels in the EU seed marketing directive and reflect the practical needs of growers and plant raisers. Most European seed companies have modern (often accredited) quality labs and have implemented quality systems to assure supply of reliable products. This means the companies are well equipped to supply vegetables seeds under 'supplier's label' as a token of high quality of seeds fully compliant with the official minimum requirements for EU Standard Seed. Supply of branded vegetable seeds under supplier label is well accepted in the market. In case of not meeting the customer expectations communication lines between customers and seed companies are short and complaints are generally handled quickly and adequately in view of continued good customer relationship. Furthermore the vegetable seed business is very international with an estimation of 50% of turnover in value of exportation from EU toward 3rd countries in a context of worldwide competition with "Standard" seeds. At last these disposals are in line with OCDE scheme for vegetable seeds. In coherence with the revision of Plant Health regime if some harmful organisms are re-classified and transferred to S&PM regime as Regulated Non Quarantine Pests following the criteria of IPPC the monitoring could be assumed by delegation of phytosanitary controls under official supervision of accredited operators. Conclusion: the supply of good quality of "Standard" vegetable seed is adequate and there are no structural problems in the market that could be solved by means of changing over to the supply of certified seed. The additional costs of vegetable seed certification, for seed companies, for governments and for customers, would be significant without real added value.

6.1.1 Please explain the new scenario in terms of key features

6.2 Do you agree with the comparison of the scenarios in the light of the potential to achieve the objectives?

No

6.2.1 Please explain:

| | | |
|---|--------------------------------|--------------------------------------|
| SCENARIO CLAUSE: Homogenization of variety Registration / Control of Lots/ Breeders, Suppliers Registration | | E.U Catalogue (national application) |
| Uniform DUS protocols in E.U and accreditation Examination centers public, private (on request) | | |
| Control of lots remain national | | PROFESSIONAL VARIETIES |
| « DUS uniform Registration /Protection» | | Registration |
| Agricultural species | Vegetable species | |
| (2) DUS* (3) Full VCU E** | (2) DUS E* | (2) |
| National Application | (2) National Application | |
| EU Common Catalogues | EU Common Catalogues | Control of Lots |
| Agricultural species | Vegetable species | |
| (3) Examination | (1) Choice of supplier | |
| under official supervision | (3)Examination | or (1)Control by supplier |
| under official supervision | with (2) official post control | (2) |
| Official label | (2) Official label | (1) Supplier's label |
| *Delegation possible of 1st DUS cycle under official supervision | | E = Environment criteria |

**Private examination under official supervision on actual species. Authorizations for unlisted varieties Ornamental seed species no longer covered.
(1) Private operator (2) official control (3) Official supervision

7. OTHER COMMENTS

7.1 Further written comments on the seeds and propagating material review:

Seed business and seed markets are very specific compared to any other sector. This specificity needs to be taken into account: - progress in plant breeding is a long term process, which is incompatible with short term market views, - the technological differences of varieties cannot be directly or immediately appreciated by users; because of the biological nature of the product, which interacts with environmental factors, products cannot be standardized as other goods. Plant products need to be assessed to give reliable information to users, - each crop sector has specific constraints, which need to be considered, - Reform of the regulation must be driven by science-based criteria; innovation and productivity characteristics towards sustainable crop production

7.2 Please make reference here to any available data/documents that support your answer, or indicate sources where such data/documents can be found:

- "Plantes, parasites et pathologistes : de la compréhension des interactions à la gestion durable des résistances : Didier Andrivon" Inra Agrocampus Ouest Université Rennes 1 UMR 1099 BiO3P (Biologie des organismes et des populations appliquée à la protection des plantes) Domaine de la Motte, BP 35327F-35653 Le Rheu Cedex, France
Didier.Andrivon@rennes.inra.fr: Cahiers Agricultures, vol. 18, n° 6, novembre-décembre 2009. • "Evolution de la diversité génétique des variétés commercialisées chez différentes espèces de grandes cultures" - Bernard Le Buanec- Le Sélectionneur Français- 2010 (61) ,7-14

