

Scientific Panel on Plant Health (PLH)

Minutes of the 78th Plenary meeting

30-31 January 2019, Parma, (Italy)

“ Meeting room: EFSA – Auditorium”

(Agreed on 21 February 2019)

Participants

■ Panel Members

Claude Bragard, Katharina Dehnen-Schmutz, Francesco Di Serio, Paolo Gonthier, Josep Jaques Miret, Annemarie Fejer Justesen, Alan MacLeod, Sven Christer Magnusson, Panagiotis Milonas, Juan A. Navas-Cortés, Stephen Parnell, Roel Potting, Philippe Lucien Reignault, Hans-Hermann Thulke, Wopke Van der Werf, Antonio Vicent, Jonathan Yuen, Marie-Agnès Jacques, Lucia Zappalà,

■ Hearing Experts:

Steven White, Daniel Chapman and Gianni Gilioli (members of the EFSA PLH Panel Working Group on the update of *X. fastidiosa* pest risk assessment).

Massimo Faccoli (EFSA procurement contractor from University of Padova, Italy)

Françoise Petter (European and Mediterranean Plant Protection Organisation, EPPO)

■ European Commission DG SANTE:

Pasquale Di Rubbo, Maria Belen Marquez-Garcia, Maria Mirazchiyska, Panagiota Mylona, Wolfgang Reinert.

■ EFSA:

ALPHA Unit: Ewelina Czwieczek, Alice Delbianco, Makrina Diakaki, Ciro Gardi, Michela Guzzo, Tomasz Kaluski, Virag Kertesz, Mart Kinkar, Svetla Kozelska, Nikolaus Kriz, Andrea Maiorano, Maria Rosaria Mannino, Elisabeth Meyer-Landrut, Marco Pautasso, Stefano Preti, Giuseppe Stancanelli, Emanuela Tacci, Sara Tramontini, Sybren Vos

SCER Unit: Bernard Bottex

AMU Unit: Olaf Mosbach-Schulz

EFSA Art. 36 Tasking Grants: Elma Bali (UTH, Greece), Michela Chiumenti (CNR, Italy), Gritta Schrader (JKI, Germany).

■ Observers:

Magdalena Gawlak and Jean-Claude Grégoire participated as observers attending at EFSA premises, whereas other 10 observers connected remotely to the meeting.

WEDNESDAY 30 January 2019

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from Josep Jaques Miret for the first day of the plenary.

2. Brief introduction of Panel members and Observers in the room

Panel Members, EFSA staff and Observers presented themselves.

3. Adoption of agenda

The agenda was adopted without changes

4. Declarations of Interest of Scientific Committee/Scientific Panel/ Members

In accordance with EFSA's Policy on Independence and the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declarations of Interest filled out by the Panel members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process.

Certain interests were declared orally by the members before the beginning of the meeting. For further details on the outcome of the screening of the Oral Declaration(s) of Interest made at the beginning of the meeting, please refer to the Annex.

5. Presentation of the Guidelines for Observers

The EFSA Guidelines for Observers¹ for open plenary meetings, were presented. The guidelines include a section that concerns reporting of discussions, where it is clarified that observers, including from the media, are free to report on the proceedings of the meeting, while any reference to the individual meeting participants should respect their reputation and professional integrity.

¹ <https://www.efsa.europa.eu/sites/default/files/observersguidelines.pdf>

6. Report on written procedures since 77th Plenary meeting held on 21 & 22 November 2018 Parma Italy

6.1 77th Plenary minutes

The minutes were agreed by written procedure on 12 December 2018 and then published on EFSA website (<https://www.efsa.europa.eu/en/events/event/181121-0>)

6.2 Draft PLH Panel guidance on Commodity risk assessment for High Risk Plants for public consultation

The draft guidance was endorsed by written procedure on 10 December 2018 and then published for public consultation on EFSA website (<https://www.efsa.europa.eu/en/consultations/call/181214>)

6.3 Scientific opinion on Pest Categorisation of non-EU viruses of *Cydonia*, *Malus*, *Pyrus* (EFSA-Q-2018-00790, EFSA-2018-00784, EFSA-Q-2018-00786), for adoption by written procedure by 31 December 2018

The written adoption of the Scientific Opinion on Pest Categorisation of non-EU viruses and viroids of *Cydonia* Mill., *Malus* Mill. and *Pyrus* L. was presented. The draft opinion was sent to the Panel on 18 December 2019 and adopted by written procedure in the online Distiller platform on 31 December 2019.

At the same time the Panel was also requested to agree by written procedure some changes in the Scientific Opinion on the List of non-EU viruses and viroids of *Cydonia* Mill., *Fragaria* L., *Malus* Mill., *Prunus* L., *Pyrus* L., *Ribes* L., *Rubus* L. and *Vitis* L., that was adopted on 21 November 2018. Such changes, based on new evidence collected, were as follows:

- Grapevine geminivirus A was added to the list of non-EU viruses;
- Grapevine badnavirus 1 was moved from the non-EU viruses to the viruses excluded from further categorisation;
- Grapevine enamovirus 1 was removed because being a synonym of Summer grape enamovirus (that was instead maintained in the updated list of non-EU viruses);
- the Annex A and the bibliography was updated accordingly to the above changes;
- the numbers of viruses reported in the abstract and in the conclusions were modified accordingly to the above changes made.

Such changes to the scientific opinion were adopted by the Panel by written procedure conducted from 18 to 31 December 2018.

7. New Mandates

Nothing to report

8. Feedback from Scientific Panel including their Working Groups

8.1 Update from the Working Group on the pest risk assessment of *Xylella fastidiosa* ([EFSA-Q-2018-00069](#))

The WG chair briefly introduced the mandate and presented the timeline for next meetings, drafts and final adoption of the Scientific Opinion. An update on the progress and preliminary results of the different activities was presented, mainly on:

- Asymptomatic period
- Risk Reduction Options
- Short and long range spread models
- Areas of potential establishment
- Impact

During the presentation, the WG answered the questions of the Panel members, and of EC DG SANTE representatives.

8.2 Update on comments received in the public consultation on the draft PLH Panel guidance on High Risk Plants (HRP) commodity risk assessment ([EFSA-Q-2018-00117](#))

The WG chair provided an overview on the procedure and mandate with the aim of introducing the topic to the observers to the Open Plenary. The structure of the HRP dossier was briefly summarized, and the actual list of HRP presented.

8.3 Update from the Working Group on Bonsai Plant derogations ([EFSA-Q-2017-00715](#), [EFSA-Q-2018-00277](#))

Firstly, the WG chair briefly presented the background and the terms of reference of the mandate dealing with the request from Japan regarding export of black pine (*Pinus thunbergii* L.) bonsai to the EU. When developing the opinion the WG follows the main principles of the commodity risk assessment methodology currently under development by the PLH Panel (see agenda point 8.2.) applying the relevant selection criteria to define the list of actionable pests. For all actionable pests (i) a detailed pest sheet is

prepared, (ii) the efficacy of the applied risk reduction options is evaluated and (iii) the probability of a pest freedom of the commodity is assessed. The approach how to perform the evaluation of the risk reduction options, as well as how to deal with the potential development of pesticide resistance were discussed.

Secondly, the WG chair briefly presented the background and the terms of reference of the mandate dealing with the request from China regarding export of Japanese white pine (*Pinus parviflora* L.) bonsai to the EU. EFSA submitted a letter with a request for additional information to the European Commission. The WG will continue with its work on the opinion when the additional information will be available

Questions from Observers in the room

No questions were raised by the observers in the room

9. Scientific outputs submitted for discussion and/or possible adoption

Scientific opinion on Pest Categorisations:

Working Group on Forest Insects pest categorisation

9.1 Scientific opinion on Pest Categorisation of *Scaphoideus luteolus* ([EFSA-Q-2018-00043](#))

The Panel on Plant Health performed a pest categorisation of *Scaphoideus luteolus*, a well-defined phloem sap-feeding insect species in the family Cicadellidae (Insecta: Hemiptera). It can be identified using taxonomic keys. *S. luteolus* is only present in the eastern part of the USA. The main host plants of *S. luteolus* are species of the genus *Ulmus* (*U. americana*, *U. alata*, *U. bergmanianna*, *U. szechuanica*, *U. rubra*) but specimens have been also collected on *Vitis* sp., *Salix* sp. and *Populus* sp. The species does not cause damage by itself but it is the only confirmed vector of the phytoplasma *Candidatus Phytoplasma ulmi* (CPu), which is present in North America where it causes heavy damage to the local elms, as well as in some European countries where the local elms are considered less susceptible. *S. luteolus* has three developmental stages (egg, nymph, adult). It overwinters in the egg stage, takes 36-42 days to complete nymphal stage, and adults are found throughout the summer period. Both nymphs and adults are capable of transmitting CPu and, after acquiring the pathogen, remain infective for the rest of their life. The main pathways are cut branches and plants for planting. These pathways are not regulated for the main host, *Ulmus*, though requirements are in place in relation to other pests on *Ulmus*. These pathways are also not regulated for *Salix*. Establishment would be favoured by the wide coverage of *Ulmus* spp. in the EU territory and by climatic conditions comparable to those of the pest's

native range. *S. luteolus* meets all the criteria assessed by EFSA for consideration as potential Union quarantine pest. The criteria for considering it as a potential Union regulated non-quarantine pest are not met since the species is absent from the EU.

The opinion was adopted on 31 January 2019.

9.2 Scientific opinion on Pest Categorisation of *Arrhenodes minutus* ([EFSA-Q-2018-00793](#))

The Panel on Plant Health performed a pest categorisation of *Arrhenodes minutus*, a well-defined wood-boring insect species in the family Brentidae (Insecta: Coleoptera). It can be identified using taxonomic keys. *A. minutus* is only present in Southern Canada and Eastern USA down to Florida. The main host plants of *A. minutus* are species of the genera *Quercus*, *Ulmus*, *Fagus*, and *Populus*. The pest larvae bore galleries in the wood, causing structural damage to the timber. The pest is also a vector of the quarantine pest *Bretziella (Ceratomyces) fagacearum*. *A. minutus* most often lays its eggs in wounded parts of the trees where sap is oozing. The female bores minute holes with her snout and deposits one egg in each of them. The larvae bore a straight gallery against the grain. When the gallery nearly reaches the other side of the bole, it makes a sharp U-turn towards the point of origin. These galleries cause structural damage to the timber. The life cycle lasts generally 3 years, but some individuals develop in 2 years and a few require 4 years. The main pathways are wood and possibly plants for planting. Specific phytosanitary requirements exist for *Quercus* and *Populus* only, while *Ulmus* is regulated in relation to other pests. Establishment would be favoured by the wide distribution of host trees in the EU territory and by climatic conditions locally comparable to those of the pest's native range. *A. minutus* meets all the criteria assessed by EFSA for consideration as potential Union quarantine pest. The criteria for considering it as a potential Union regulated non-quarantine pest are not met since the species is absent from the EU.

The opinion was adopted on 31 January 2019.

Working Group on Bacteria pest categorisation

9.3 Scientific opinion on Pest Categorisation of *Ralstonia solanacearum* ([EFSA-Q-2018-00030](#))

The Panel on Plant Health performed a pest categorisation of the *Ralstonia solanacearum* species complex (RSSC), a distinguishable cosmopolitan group of bacterial plant pathogens (including *Ralstonia solanacearum*, *Ralstonia pseudosolanacearum* and two sub-species of *Ralstonia syzygii*) of the family Burkholderiaceae. The RSSC causes bacterial wilt in solanaceous crops, such as potato, tomato and pepper, but can also cause wilts in other important food crops such as fruit banana, plantain banana and cassava.

The pest survives in the soil, and a number of weed species can also be infected by the pest, often asymptotically. The RSSC is regulated in Council Directive 2000/29/EC (Annex IAI) (indicated by its former name *R. solanacearum*, as delimited by Yabuuchi et al.) as a harmful organism whose introduction into the EU is banned. In addition, Council Directive 1998/57/EC (amended by Commission Directive 2006/63/CE) concerns the measures to be taken within EU Member States (MS) against the RSSC to (a) detect it and determine its distribution, (b) prevent its occurrence and spread, and (c) to control it with the aim of eradication. The pest is present in several EU MS, but in all cases with a restricted distribution and under official control. New phylotypes of the RSSC could enter the EU primarily via host plants for planting (including seed tubers). The pest could establish in the EU, as climatic conditions are favourable, hosts are common and the pathogen has high adaptability. Spread is mainly via plants for planting. Substantial crop losses in the EU would occur in the presence of RSSC epidemics. The RSSC is regarded as one of the world's most important phytopathogenic bacteria due to its broad geographical distribution, large host range, aggressiveness, genetic diversity and long persistence in soil and water. The list of hosts and commodities for which the pest is regulated is incomplete due to the high diversity of hosts, and the lack of knowledge of the complete host range. Moreover, the comparative epidemiology of the different species has not yet been studied. The criteria assessed by the Panel for consideration of the RSSC as potential quarantine pest are met, whilst, for regulated non-quarantine pests, the criterion on the widespread presence in the EU is not met.

The opinion was adopted on 31 January 2019.

Working Group on Agricultural Fungi pest categorisation

9.4 Scientific opinion on Pest Categorisation of *Trechispora brinkmannii* ([EFSA-Q-2018-00019](#))

The Panel on Plant Health performed a pest categorisation of *Phymatotrichopsis omnivora*, the causal agent of Phymatotrichum root rot of more than 2,000 dicotyledonous plant species. The pest is listed as *Trechispora brinkmannii* in Annex IAI of Directive 2000/29/EC. *P. omnivora* is a well-defined fungal species and reliable methods exist for its detection and identification. It is present in south-western USA, northern Mexico, Libya and Venezuela. The pest is not known to occur in the EU. *P. omnivora* has an extremely wide host range; impacts have been documented for cotton, alfalfa, apple, peach and grapevine as the major cultivated hosts. All major hosts and pathways of entry of the pest into the EU are currently regulated, except for soil and growing media attached or associated with plants originating in Libya. Host availability and climate and edaphic matching suggest that *P. omnivora* could establish in parts of the EU and further spread mainly by human-assisted means. The pest infects the roots

causing wilting and death of its host plants. The introduction of the pest in the EU territory would potentially cause direct and indirect impacts at least to cotton, alfalfa, apple, peach and grapevine production. The main uncertainties concern the host range, the extrapolation to the EU of the climatic and edaphic conditions favouring the disease in some of the infested areas, the role of conidia in the epidemiology of the disease and the magnitude of potential impacts to the EU. *P. omnivora* meets all the criteria assessed by EFSA for consideration as potential Union quarantine pest. The criteria for considering *P. omnivora* as a potential Union regulated non-quarantine pest are not met, since the pest is not known to occur in the EU.

The opinion was adopted on 31 January 2019.

WG on Agricultural Insects pest categorisation

9.5 Scientific opinion on Pest Categorisation of *Thrips palmi* ([EFSA-Q-2018-00754](#))

The EFSA Panel on Plant Health (PLHP) performed a pest categorisation of *Thrips palmi* (Thysanoptera: Thripidae), for the European Union (EU). *T. palmi* is listed in Annex IAI of 2000/29 EC. Using molecular methods cryptic speciation has been shown although no new species from the group have been formally described. Here we consider *T. palmi sensu lato* as a defined species native to southern Asia, which has spread to tropical and sub-tropical countries in Asia, the Pacific, North, Central and South America, Africa and Australia. *T. palmi* has been reported from many different hosts in 20 botanical families; Cucurbitaceae, Solanaceae and Orchidaceae are of primary importance. *T. palmi* has been intercepted many times on plants from these families. Wild and cultivated hosts are widespread in the EU. However, as a sub-tropical and tropical species, only a small area of the EU provides climatic conditions where establishment may be possible outdoors. Several host plants are cultivated in glasshouses where conditions may be more favourable for establishment in year-round crops. There have been past outbreaks of *T. palmi* in EU glasshouses and outdoors in Portugal. *T. palmi* causes feeding and oviposition damage and populations in Asia are competent vectors of tospoviruses. Impacts could occur on many hosts, especially Cucurbitaceae, Solanaceae and ornamental plants particularly in glasshouses. Phytosanitary measures aim to prevent the entry of *T. palmi* specifically on cut flowers of Orchidaceae and fruits of *Momordica* and *Solanum melongena*. The species meets all the criteria assessed by EFSA to satisfy the definition of a Union quarantine pest; while it does not satisfy all the criteria for it to be regarded as a Union regulated non-quarantine pest (RNQP).

The opinion was adopted on 31 January 2019.

10. Feedback from Scientific Panel including their Working Groups (continued):

Update from the Working Group on Forest Insects Pest Categorisation and state of the art of the EFSA Art. 36 Tasking Grant project on listing and categorisation of non-EU Scolytinae (bark beetles) of coniferous trees.

Massimo Faccoli (researcher from Padova University) presented the comprehensive worldwide list of Scolytinae species living on coniferous hosts. This study is part of a public procurement project that supports the EFSA PLH Panel Working Group on Forest Insects categorisation to prepare a pest categorisation on non-EU Scolytinae of coniferous hosts. The list of Scolytinae species was derived from systematic literature search of diverse sources. The contractor and his team individually analysed information on over 6000 Scolytinae species, to end up with a list of 808 species living on conifers. The next steps of the study will be to narrow this list to the non-EU species, and collect data on their life history, detection and identification, pathways of arrival, dispersal capacity, impacts, etc.

11. Other scientific topics for information and/or discussion:

Presentation of the EPPO project on bark beetles of non-coniferous trees.

Françoise Petter (EPPO) presented the EPPO Study on bark beetles and ambrosia beetles on non-coniferous wood. The aims of this study are to identify indicator species of bark beetles and ambrosia beetles (Scolytinae, possibly also some Platypodinae) and to define measures for non-coniferous wood that may cover the risk of introduction for other species. The study discusses risk factors and potential measures based on a number of case studies. The document will be finalised during 2019.

Questions from Observers in the room

No questions were raised by the observers in the room

End of afternoon session

THURSDAY 31 January 2019, h 8:30

12. Feedback from the Scientific Panel, including their Working Groups

12.1. Update from the Working Group on bacteria pest categorisation

12.1.1. Presentation of the pest categorisation approach and the draft list of non-EU phytoplasma of *Cydonia* Mill., *Fragaria* L., *Malus* Mill., *Prunus* L., *Pyrus* L., *Ribes* L., *Rubus* L. and *Vitis* L. ([M-2017-0055](#))

The chair of the bacterial plant pathogens WG updated the Panel on the progress of the pest categorisation of non-EU phytoplasmas of the above-mentioned fruit plants. A preliminary list of non-EU phytoplasmas of the target host plants was discussed and endorsed for circulation among the EU Member States National Plant Protection Organisation, so as to obtain when applicable data and evidence on such organisms.

12.2. Update from the Working Group on *Pantoea stewartii* USA corn seed derogation ([EFSA-Q-2018-00902](#))

The chair of the WG on the *Pantoea stewartii* US derogation updated the Panel on the progress of the WG. The WG has made good progress since the last Panel plenary meeting in retrieving data, identifying potential pathways of entry and planning further work.

12.3. Update from the Working Group on viruses pest categorisation (M-2017-0055)

The chair of WG updated the Panel about the progress of the WG. The WG prepared two opinions: Pest categorisation of non-EU viruses and viroids of *Vitis* L. and Pest categorisation of non-EU viruses and viroids of *Prunus* L. Both categorisations are foreseen for adoption in March and will be circulated among the panel members in February for their review.

12.4. Update from the Working Group on potato viruses pest categorisation (M-2017-0055)

An update on progresses and challenges was provided by the WG chair. In particular the Panel discussed the possible approaches to deal with non-EU isolates of viruses already present in the EU, taking into account precedent work by the Panel-

12.5. Update from the Working Group on agricultural insects pest categorisation (M-2017-0055)

The WG Chair gave an update about the ongoing activities, including group pest categorisations of: non-EU Margarodidae, 'non-EU Cicadomorpha known to vector plant pathogenic *Xylella* spp., and non-EU Tephritidae.

13. Feedback from EFSA and its Working Group

13.1 Update on the Plant Health surveillance mandate ([M-2017-0137](#))

The EFSA Art. 31 mandate on pest surveillance and its progress were presented. In particular, the outcomes of the workshop recently conducted in Tallinn, Estonia, on 23-25 January 2019, within the Art. 36 cooperation project with Estonia Agriculture Board on "Cooperation in crisis preparedness for Emerald Ash Borer in the European Union – Workshop 1: EAB Surveillance", were presented. Then the pest survey card on *Agrillus planipennis* was presented. Also, a presentation was provided on possible EAB surveillance strategies proposed in the above mentioned survey card.

Questions from Observers in the room

No questions were raised by the observers in the room

13.2 Update on the Plant Health horizon scanning mandate ([M-2017-0012](#))

- Media monitoring newsletter

The EFSA presentation covered the progress of the project, the main issues addressed in the last two editions (12/2018 and 01/2019) of the media newsletter and the ongoing work on the monitoring of the scientific literature. During the discussion, the panel was presented with information on how to access all editions of the media newsletter and its future free access from Wiley. The ongoing work with JRC and ANSES on the development of the pilot scientific newsletter was presented.

14. Update from Scientific Committee and its Working Groups

The Panel was informed that the Scientific Committee has endorsed the EFSA draft guidance on communication of uncertainty in scientific assessments ([EFSA-Q-2017-00466](#)) for publication.

A Scientific Committee Self task mandate on interpretation of epidemiological studies was presented. This should focus on the appraisal and integration of epidemiological studies, and their application in risk assessment. It should cover all types of epidemiological studies, i.e. descriptive and analytical epidemiological studies, and studies targeting animals, plants and the environment, as well as humans. Equally, the field

of nutrition, and both chemical hazard and biological hazard studies, should be included in the guidance.

15. Feedback from the European Commission

European Commission provided an update of their activities and a positive feedback on how EFSA PLH Panel outputs are utilised by the EU risk managers: from updating legislation and relative annexes, to high risk plants, pest categorisations and pest risk assessments, horizon scanning and surveillance. A new mandate for a pest risk assessment is going to be sent to EFSA.

16. Other scientific topics for information and/or discussion

- Update on the organisation of the second European research conference on *Xylella fastidiosa*, Ajaccio (FR) 29-31 October 2019

EFSA briefly presented the organisation of the second European research conference on *Xylella fastidiosa*.

- Trainings for Panel members

EFSA briefly presented the structure of a training course tailored to the needs of the PLH Panel organised with external contractors for presenting the tool kit for performing quantitative pest risk assessment and environmental impact assessment. The agreed dates with the PLH Panel members are the 23rd and 24th May 2019. A dedicated leaflet of the course will be circulated when the registration to the course is open.

17. Any other business

Questions from and answers to Observers (in application of the guidelines for Observers)

Two questions were raised by online observers.

Question nr 1: the assumption that impacts on olive trees will occur in all growing areas of the EU, as presented by G Gilioli, contradicts a bit the maps of potential establishment presented by J Navas. It seems to me that in the map's large areas of olive production in colder areas of Spain are in low risk colour.

Answer: the maps of potential establishment for *Xylella fastidiosa* shown during the plenary are still preliminary results and were shown for all subspecies combined, statistical analysis is ongoing to better characterize the areas of potential establishment for subspecies pauca. The different

colours shown in these preliminary maps are not indicating the impact on olive but refer to the establishment of the pathogen.

Question nr 2: will the impact on *Xylella* on ornamentals and nurseries be estimated?

Answer: Yes. Work is ongoing also on the impact of *Xylella* on ornamentals and nurseries.

Comment (from Oscar Alomar): happy to see new developments of the Medisys media scanning we did contribute to.

Reply: many thanks for the positive comment.

MEETING CLOSURE

Annex

Interests and actions resulting from the Oral Declaration of Interest done at the beginning of the meeting

With regard to this meeting, Dr. Francesco Di Serio declared the following interest: with regard to the draft Scientific opinions on the List of non-EU phytoplasma of *Cydonia* Mill., *Fragaria* L., *Malus* Mill., *Prunus* L., *Pyrus* L., *Ribes* L., *Rubus* L. and *Vitis* L., he informed the Panel that he participates to the work on this opinion as coordinator of an EFSA Art. 36 Tasking Grant Specific Contract. In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, and taking into account the specific matters discussed at the meeting in question, the interest above was deemed to represent a Conflict of Interest (CoI).

This results in the exclusion of the expert from discussion or voting as PLH Panel Member of item 6.7, however he can participate to this agenda meeting to present the work he conducted under the EFSA Art 36 Tasking Grant Specific Contract.

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³

http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf