

The Joint Meeting on Pesticide Residues (JMPR) and the review of glyphosate: Massive conflicts of interest

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Andreas Bauer-Panskus

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Testbiotech e. V.
Institute for Independent
Impact Assessment in
Biotechnology

This version has been – in comparison to the original version - slightly changed. The reason was direct communication with one of the experts mentioned in the report, Dr Alan Boobis, who asked Testbiotech to correct some details in regard to his affiliations with the tobacco industry. In response, Testbiotech corrected one sentence to make it clear that Dr Boobis is not a member of the British American Tobacco (BAT) group, but only joined a meeting. To give a full picture of the evidence available, we also added an Annex that gives a tabled overview of the comments made by Dr Boobis and the relevant Testbiotech findings.

The Joint Meeting on Pesticide Residues (JMPR) is of particular importance for the review of pesticides. It is an expert body administered jointly by the World Health Organization (WHO) and the Food and Agriculture Organization of the United Nations (FAO). The working group has the task of harmonising the requirements for the risk assessment of pesticide residues at a global level, and is therefore considered by governments and authorities as determinative. The work of JMPR includes the following aspects:

- Collection of data on pesticide residues and their evaluation,
- Pesticide analysis,
- Evaluation of MRLs (Maximum Residue Levels),
- Evaluation of toxicological data,
- Review of the acceptable daily intake (ADI) of pesticides.

The JMPR is a key global institution for the evaluation of pesticides, which also makes it a major target for industry attempts to influence outcomes.

A long tradition of conflicts of interest ..

As is clear from scientific studies and expert reports, industry has been very successful in the past in this respect. One particular example is the tobacco industry, which had proven direct influence on the JMPR in the 1990s. This is shown in an internal study for the WHO (2000) and a publication by McDaniel et al. (2005). The information came to light after the tobacco industry was legally obliged to make a large part of its internal documents publicly available. The Truth Tobacco Industry Documents Archive (formerly known as the Legacy Tobacco Documents Library known) includes comments, letters, PR materials and internal strategy papers and can be freely accessed via internet.¹

The focus of the revelations regarding the JMPR was toxicologist Gaston Vettorazzi, who worked as a paid (and secret) lobbyist for the tobacco industry. As the documents show, his task was to enforce the interests of the tobacco industry in the JMPR working group (McDaniel et al., 2005).

¹ <https://www.industrydocumentslibrary.ucsf.edu/tobacco/>

Vettorazzi was especially hired to ensure that the JMPR did not declare a fungicide used in tobacco cultivation as carcinogenic. According to the WHO authors and McDaniel et al., he fulfilled his mission to the full satisfaction of tobacco industry. Therefore, in the 2000 WHO study, it was concluded that the World Health Organization should strengthen its policy on conflicts of interest.

"To restore credibility and to prevent future occurrences of similar attacks on standard-setting activities, the committee of experts did Believe WHO must reform its approach to conflict of interest and Provide strong guidance walls reinforcement for ethical standards."

There were certainly enough reasons for a drastic tightening of the rules on conflicts of interest, since there were also other experts who belonged to the JMPR in the 1990s working secretly for the tobacco industry. One of these experts was Joseph Borzelleca, a now retired professor at Virginia Commonwealth University, who worked as a lobbyist and contract researcher for the US tobacco industry. He was also a member of the "Tobacco Research Scientific Advisory Board" of the tobacco industry and member of the scientific advisory board of Philip Morris (Wertz et al., 2011).² According to Wertz et al., the Truth Tobacco Industry Documents Archive contains thousands of documents related to Joseph Borzelleca. Interestingly, both Joseph Borzelleca and Gaston Vettorazzi both had affiliations with the International Life Sciences Institute (ILSI), which is also involved in current conflicts of interest at the JMPR (see below). For example, Borzelleca was a member of the Board of Directors at ILSI.³

The JMPR, Germany and glyphosate

The JMPR has already assessed the active ingredient glyphosate several times (for example in 2004 and 2011). As shown in a report published by Friends of the Earth Germany (BUND),⁴ these assessments were carried out by experts at the German Federal Institute for Risk Assessment (BfR). German authorities played an important role in both the first registration of glyphosate in the EU (in the late 1990s) and in the current re-registration process. In both authorisation processes, Germany served as a so-called rapporteur and delivered the first draft regarding the risk assessment of glyphosate. The dual role of the experts at national, EU and international level represent a clear conflict of interest.

It has long been recognised that the German Federal Institute for Risk Assessment (BfR) has, at times, several experts in the JMPR. Rudolph Pfeil, who worked together with ILSI-affiliated Vicki Dellarco on the glyphosate assessment in 2011, and Christian Sieke are two BfR experts involved in the work of the JMPR. Previous to this, Roland Solecki, the current head of the BfR pesticide department, was actively involved with the JMPR from 1998 until 2013, as was Ursula Banasiak from around 1994 until 2014. This means that BfR experts, apart from their role in assessing glyphosate in the EU, probably also had an ongoing involvement in the international assessment of the pesticide.

As is apparent from the BUND report, the JMPR is also responsible for the unusually high limit for glyphosate residues in genetically engineered, glyphosate-resistant soybeans. Shortly before the launch of the soybeans produced by Monsanto, JMPR suggested raising the maximum residue level to 20mg / kg.⁵

² See also: <http://www.nationofchange.org/2015/04/16/food-safety-scientists-have-ties-to-big-tobacco/>

³ <http://www.fda.gov/ucm/groups/fdagov-public/@fdagov-foods-gen/documents/document/ucm266316.pdf>

⁴ <http://www.bund.net/pdf/glyphosat-studie>

⁵ http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/JMPR/Reports_1991-2006/Report1994.pdf

Recent conflicts of interest: Alan Boobis, Angelo Moretto, ILSI, and glyphosate

In May 2016, the JMPR published an updated risk assessment on the active substance glyphosate.⁶ The JMPR came to the conclusion that an increased cancer risk for humans is unlikely ("glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet"). This constitutes JMPR support for the conclusions of the European Food Safety Authority and the German Federal Institute for Risk Assessment (BfR), which are the basis for the current proposal of the European Commission to continue with the authorisation of glyphosate in Europe. The WHO Cancer Agency IARC had previously rated glyphosate as "probably carcinogenic".⁷

This time several experts with close ties to industry were involved with the current JMPR re-evaluation of glyphosate. These include the British pharmacologist Alan Boobis and the Italian toxicologist Angelo Moretto. For many years, Alan Boobis was one of the most influential figures within the European Food Safety Authority EFSA. He was the author of guidelines for the development of test criteria, and was a member of EFSA expert committees, task forces and working groups. In the course of a revision of EFSA rules on conflicts of interest, Boobis left the EFSA in 2012.⁸ Similarly, Moretto had to leave EFSA (already in 2011) due to undeclared interests.⁹

As the British newspaper the Guardian reports,¹⁰ both Boobis and Moretto hold high positions in the industry-funded think tank International Life Sciences Institute (ILSI). Major companies supporting ILSI include glyphosate producers such as Monsanto, Syngenta or Dow. In fact, Boobis' activities as a consultant for chemical and pharmaceutical companies have long been known.¹¹ Both Boobis and Moretto belonged to the JMPR at the time (2004 to 2011), when the Panel first concluded on the safety of glyphosate.¹²

Alan Boobis served as chairman of the JMPR glyphosate expert group, Angelo Moretto as rapporteur.¹³

Alan Boobis and the tobacco industry

Further Testbiotech research shows that Alan Boobis has links with the tobacco industry (see, for example, Wertz et al., 2011).

According to documents from the Truth Tobacco Industry Documents Archive, Boobis is listed as a co-author of studies from the project "The In Vivo and In Vitro Analyses of the Biological Effects of Smoke-Related Chemicals" funded by the tobacco industry in the 1970s.¹⁴

According to the tobacco industry documents, participation in this project, was not a one-off

⁶ <http://www.who.int/entity/foodsafety/jmprsummary2016.pdf?ua=1>

⁷ <http://monographs.iarc.fr/ENG/Monographs/vol112/mono112-09.pdf>

⁸ http://corporateeurope.org/sites/default/files/attachments/unhappy_meal_report_23_10_2013.pdf

⁹ <http://earthopensource.org/earth-open-source-reports/europes-pesticide-and-food-safety-regulators-who-do-they-work-for/>

¹⁰ www.theguardian.com/environment/2016/may/17/unwho-panel-in-conflict-of-interest-row-over-glyphosates-cancer-risk?CMP=share_btn_tw

¹¹ See for example: www.ema.europa.eu/docs/en_GB/document_library/contacts/boobisa_DI.pdf, <http://corporateeurope.org/food-and-agriculture/2016/05/busy-may-professor-boobis>

¹² <http://apps.who.int/pesticide-residues-jmpr-database/pesticide?name=GLYPHOSATE>

¹³ <http://www.who.int/foodsafety/faq/en/>

¹⁴ See for example: <https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/tnyv0215>, <https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/xlvf0040>, <https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/njyn0214>

mistake by a young scientist. In 2000, Boobis attended a meeting¹⁵ of a front group founded by the tobacco industry.¹⁶ The Risk Assessment Forum launched by British American Tobacco (BAT) was intended to support supposedly "healthier" cigarettes.¹⁷ However, the forum also had wider objectives. Several scientific publications (Smith et al, 2010; 2015) describe in detail how BAT and other corporations (very successfully) tried to steer the EU treaties in an industry-friendly direction with groups such as the "Risk Assessment Forum".¹⁸ Smith et al. (2010) draw the following conclusions from their investigations:

„Our findings suggest that BAT and its corporate allies have fundamentally altered the way in which all EU policy is made by making a business-oriented form of IA [Impact Assessment] mandatory. This increases the likelihood that the EU will produce policies that advance the interests of major corporations, including those that produce products damaging to health, rather than in the interests of its citizens.“

There are also connections between Alan Boobis and the tobacco industry at an international level. For many years, Boobis was a member and even convenor¹⁹ of a DIN / ISO working group on tobacco products, which was, according to Bialous & Yach (2001), influenced by the tobacco industry (see also Grüning et al., 2011).

Other working group members also have a history of working for industry or industry-funded organisations. Some examples:

- David Eastmond: One of the experts with connections to the tobacco industry. According to information in the Tobacco Archive, he applied for tobacco industry funding for his research.²⁰
- Raymond Tice: An expert with ties to the International Life Sciences Institute (ILSI). For example, he co-authored a 2003 study commissioned by ILSI.²¹
- Aldert Piersma: A long-term member of ILSI HESI developmental and reproductive toxicology technical committee.²²

Summary and conclusions

In summary, considering the present findings on the connections that Alan Boobis, Angelo Moretto and others have to industry, it is highly disturbing that the Secretariat of the JMPR chose these experts for the working group on glyphosate. Obviously, there is still a lack of basic rules for dealing with conflicts of interest at the JMPR.

The guidelines of the working group regarding conflicts of interest, which can be found in the "Guidance document for WHO monographers and reviewers" seem to be more or less meaningless because close ties to industry go largely unnoticed.²³

„In addition, the WHO Joint Secretary will ask if there are any compounds for which there is a conflict of interest, such that monographers should not be involved with a particular

15According to Mr, Boobis he just attended one meeting and was not a member (see Annex)

16 See for example: <https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/nljin0197>,
<https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/yrbk0206>

17 Big tobacco distorted EU treaty, scientists say, <https://euobserver.com/economic/29252>

18 <https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/tjpk0206>

19 See for example: <https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/fsxb0150>

20 <https://www.industrydocumentslibrary.ucsf.edu/docs/#id=ygbv0088>,

<https://www.industrydocumentslibrary.ucsf.edu/docs/#id=sfyc0000>

21 <https://uncch.pure.elsevier.com/en/publications/the-use-of-non-tumor-data-in-cancer-risk-assessment-reflections-o>

22 www.ema.europa.eu/docs/en_GB/document_library/contacts/piersmaa_CV.pdf

23 www.who.int/entity/foodsafety/areas_work/chemical-risks/jmpr_Guidance_Document_FINAL.pdf?ua=1

compound. Such conflicts of interest include the following examples:

- Monographers have worked for or have an interest in the sponsoring company.
- Monographers have performed some of the studies to be evaluated.
- Monographers have recently been involved closely with preparing an evaluation of a compound for a national or another supranational body.

The last point is important as, although familiarity with a compound and the supporting data can make preparation of the monograph easier, there is the potential perception that the JMPR evaluation might not be entirely independent of the previous evaluation.“

The deficiencies regarding JMPR standards for avoiding conflicts of interest are particularly evident in the statement in the JMPR monography for the year 2015. Apparently, no conflicts were identified:

„The Secretariat informed the Meeting that all experts participating in the 2015 JMPR had completed declaration-of-interest forms and that no conflicts had been identified.“

Given the importance of the JMPR for the international assessment of pesticides, an update of the rules on conflicts of interest is essential, and should be implemented as soon as possible. Experts like Alan Boobis and Angelo Moretto, should not be granted access to the working group in future.

Given its past history of including experts secretly paid by industry, the JMPR should also clarify possible distortions in the evaluation of pesticides. In the case of Gaston Vettorazzi, the WHO has already shown that it can handle such cases.

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World Health Organization, Kessler, David A, Martiny, Anke, Zeltner, Thomas, Rander, Fazel. Tobacco Company Strategies to Undermine Tobacco Control Activities at the World Health Organization. 2000 July. British American Tobacco. <https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/fqky0202>

Annex: Overview of correspondence with Dr Boobis in June 2016

Testbiotech claim	Answer from Alan Boobis	Testbiotech answer to Alan Boobis
<p>According to documents from the Truth Tobacco Industry Documents Archive, Boobis is listed as a co-author of studies from the project "The In Vivo and In Vitro Analyses of the Biological Effects of Smoke-Related Chemicals" funded by the tobacco industry in the 1970s.²⁴</p>	<p>The papers in question: Nebert et al in Biological Reactive Intermediates 1977 and Boobis et al Pharmacology 1979 were from research I undertook at the National Institutes of Health, funded by an NIH fellowship. I had no connection with the tobacco industry and my only connection with Dr Kouri of Microbiological Associates was that both he and I were working with Dr Nebert, head of the lab at NIH.</p>	<p>Documents from the Tobacco Archive show that Dr Nebert frequently cooperated with Dr Kouri from Microbiological Associates and was therefore involved with projects funded by tobacco industry. The Tobacco Archive lists several studies (apart from the ones quoted by Dr Boobis) where funding by the tobacco industry is acknowledged, for example:</p> <p>Pelkonen, O., Boobis, A. R., Levitt, R. C., Kouri, R. E., & Nebert, D. W. (1979). Genetic differences in the metabolic activation of benzo [a] pyrene in mice. <i>Pharmacology</i>, 18(6), 281-293.</p> <p>“Portions of this work were supported via contracts from the American Council for Tobacco Research and by a Public Health Service International Fellowship (Dr. O. Pelkonen) (number 1 F05 TW-2418) .” https://www.industrydocumentslibrary.ucsf.edu/docs/#id=gkvj0215</p> <p>Apart from the cooperation projects, Dr Nebert was also funded directly by the tobacco industry (Council for Tobacco Research).²⁵</p> <p>Testbiotech acknowledges that Dr Boobis was part of the Working Group of Dr Nebert and, according to the documents, was not himself funded by the tobacco industry during his time at Dr Neberts lab.</p>
<p>In 2000, Dr Boobis became member of a front group founded by the tobacco industry.²⁶</p>	<p>This is not true. I attended, in good faith, one meeting organized by BAT at which a number of experienced toxicologists were invited to advise on whether it was possible to develop a testing strategy to determine that alternative smoking materials were less harmful than cigarettes. I received no remuneration; I even declined travel expenses, and declined to participate in further such meetings as I felt that the objectives could not be achieved.</p>	<p>Testbiotech acknowledges that Dr Boobis participated in a meeting by the group set up by British American Tobacco (BAT), but was not a member of that group.</p>

24 See for example: <https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/tnyv0215>,
<https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/xlvf0040>,
<https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/njyn0214>

25 <https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/fznl0080>

26 See for example: <https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/nljn0197>,
<https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/yrbk0206>

<p>For many years, Dr Boobis was a member and even convener²⁷ of a DIN / ISO working group on tobacco products, which was, according to Bialous & Yach (2001), influenced by the tobacco industry (see also Grüning et al., 2011).</p>	<p>I am convener (chair) of the ISO TC126 WG10 on an “Intense Machine-smoking Regime for Testing Cigarettes”. This WG was established for an exchange of information on the development of an intense smoking regime (as per the COP) between WHO and ISO experts. I was nominated by the UK Department of Health to serve as an impartial chair. I receive no support from ISO for participation. For further information on my involvement please contact Gemma Vestal at WHO.</p>	<p>Testbiotech did not claim that Dr Boobis was paid by tobacco industry. However, evidence from scientific literature shows that the working group in question is heavily influenced by the tobacco industry. For example, Grüning et al. (2011) write: “The tobacco industry also gathered information via its well established links with the International Standardization Organization (ISO), notably Technical Committee 126 (ISO/TC126) on tobacco products and testing methodologies. ISO/TC126 committee chairman Peter Adams was a former employee of Imperial Tobacco. The committee’s secretariat was run by the German Institute for Standardization (DIN, Deutsches Institut für Normung eV) in Berlin, Germany. DIN also had tobacco company employees serving on its own committee on tobacco smoke.”</p> <p>Given the position of Dr Boobis in ILSI’s leadership and ILSI’s role in disrupting the WHO tobacco policy, doubts remain whether a representative of ILSI is the right person to serve as an “impartial chair”.</p>
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Further comment

Recent activities by Dr Boobis with regard to so-called endocrine disruptors may serve as another example of a connection with the tobacco industry. As the French journalist Stephané Horel found out, Dr Boobis and other scientists with close ties to industry met the EU Health Commissioner in May 2016 on this subject. According to Horel, the scientists had their expenses paid by the European Risk Forum (ERF), a think tank created by the tobacco industry in the 1990s to counter bans on smoking in public places. In 2016, the ERF was funded, among others, by the tobacco industry (British American Tobacco and Philip Morris).²⁸

Literature

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<http://tobaccocontrol.bmj.com/content/early/2011/06/15/tc.2010.042093.short>

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²⁷ See for example: <https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/fsxb0150>

²⁸ <http://www.environmentalhealthnews.org/ehs/news/2016/june/endocrine-disrupters-final-maneuvers-by-brussels2019-industry-linked-scientific-community>

This evidence is contested by Prof Boobis in direct communication with Testbiotech, but was confirmed by Horel by further informations.