AmCham EU
SPEAKING FOR AMERICAN BUSINESS IN EUROPE

Comments on the Second Commission Endocrine Disruptors Roadmap – "Towards a more comprehensive EU Framework on endocrine disruptors"

AmCham EU speaks for American companies committed to Europe on trade, investment and competitiveness issues. It aims to ensure a growth-orientated business and investment climate in Europe. AmCham EU facilitates the resolution of transatlantic issues that impact business and plays a role in creating better understanding of EU and US positions on business matters.

AmCham EU has been following the developments around the EU's framework on endocrine disruptors (EDs) and welcomes the Commission's roadmap for taking stock of what has been achieved in this area over the last several years. While these efforts will strengthen health and environmental protection to a certain degree, some concerns still exist.

Comments on "Understanding of the problem" (Section A of the Roadmap)

Taking account of the definition of endocrine disruptors in the Roadmap, AmCham EU believes it is inaccurate to state that "scientific evidence has increasingly confirmed the link between exposure to endocrine disruptors and human diseases and negative impacts on wildlife." Rather substantial evidence shows lifestyle factors (overconsumption of food and drink, lack of exercise, alcohol consumption, and smoking) are the major factors in human diseases (e.g WHO Report on Non-communicable diseases - http://www.who.int/chp/ncd_global_status_report/en/). Moreover, the Commission in its Impact Assessment 'defining criteria for identifying endocrine disruptors in the context of the implementation of the plant protection products regulation and biocidal products regulation', found that the link is controversial. The report holds that, "*the possible association between incidence of certain human diseases and exposure to endocrine disruptors (EDs) has been raised in some international reports on the state of science on EDs which are mentioned below. However, evidence is scattered and its interpretation controversial, so that a causal link or even a possible association between ED exposure at environmental levels and the diseases mentioned in connection is not agreed among experts*.'

It is then rather surprising, given the scientific evidence to read in the roadmap that "nutrition or lifestyle" are "confounding factors" in ascertaining the specific role of endocrine disruptors in the development of human disease. Given the scientific evidence showing the role of lifestyle factors far outweigh any potential role of endocrine disruptors in human diseases, making it extremely difficult to detect in epidemiology studies any significant contribution of endocrine disruptors.

Notwithstanding the above comment AmCham EU recognizes it is still of high importance to test and assess chemicals for their potential adverse endocrine related effects and to

identify safe limits of exposure to ensure risk management and safe use. In this context AmCham EU would note that existing toxicology studies identify the adverse effects of substances regardless of the mechanism of action, and that regulatory action is already possible on that basis. This already means that a high level of protection of human health and the environment is present in the EU with respect to chemical substances via the existing extensive regulatory framework on chemical substances (REACH, CLP, RoHS, Medical Devices, Toys, Food contact, Cosmetics etc.). Understanding mechanisms of action like endocrine disruption provides important information to set the relevant regulatory framework. Threshold / non-threshold effects carcinogens have been indeed regulated for several decades now, however increased knowledge on the mechanisms of actions helps ensuring a more effective management. Concerning threshold/non-threshold effects, strong evidence is lacking to support the hypothesis that EDs operate *via* a non-threshold mechanism. EDs should be regulated as threshold substances.

AmCham EU acknowledges the progress made by the European Commission with regard to the development of the biocides and crop protection agent criteria for the identification of endocrine disruptors. The criteria importantly and appropriately put emphasis on the WHO IPCS definition of EDs, the need for systematic review, and weight of evidence assessments of all the relevant data.

Given the finalization of criteria on biocides and crop protection agents it would now seem appropriate to consider criteria for other sectors, recognizing that in some other sectors substances are not designed with the intent of biological activity and there may be less data available on such substances. With respect to REACH chemicals this would also raise the need for consideration of guidance on Equivalent Level of Concern (ELoC) for EDs re: Article 57(f).

With regard to the ECHA and EFSA guidance, while this has involved extensive work, AmCham EU is concerned to note that the guidance appears to try to re-write the criteria resulting in the guidance being not fit for purpose. We would therefore like to see an early review of the document, so as to allow the guidance to reflect and improve upon the outcomes that it will have generated.

With respect to the reference to “complex issues like the cocktail effect”, AmCham EU recognizes it may be appropriate in some cases, based on the science, to consider such effects. Under REACH the additive effects of some substances have already been considered in restrictions under REACH (re: LMW phthalates). Equally though science has shown that some chemicals have inhibiting effects on other substances and this should also be taken into account where justified. Indeed this knowledge is the basis of antidotes to natural and synthetic toxic substances. In practice such additive and inhibitory effects require in-depth scientific data and assessments and can then be applied only on a selective basis.

Combined effects are not limited to ED's. Therefore, we believe they should be systematically addressed within the Commission's on-going programme(s) re: JRC reviews of 2014 and 2016 plus EFSA review of 2015.

Comments on "Possible Solutions" (Section B of the Roadmap)

AmCham EU agrees with the Commission that "A coherent framework of different policies is the appropriate way to deal with endocrine disruptors" and fully supports that the communication will now be "taking stock of progress achieved so far and identify areas where further action would need to be taken in the future… highlighting the different facets of the issue and taking stock of the progress achieved in the EU the past twenty years as regards scientific knowledge, policy and legislation and international cooperation." Significant progress has been made and this will strengthen health and environmental protection to some degree, recognizing the already high level of protection.

With respect to the areas where further action would need to be taken in the future, AmCham EU has the following comments:

- **"Addressing the gaps in knowledge, for example by fostering research activities in specific areas, encouraging data gathering and data sharing;"** The Commission aims to provide 'clear and comprehensive information' to its citizens and clarify the 'scientific uncertainty [that] amplifies citizens' concerns about whether controls are adequate'. It aims to do this by addressing significant outstanding questions by organizing larger scale focused collaborative research initiatives. An example of such an initiative is the Clarity-BPA study performed in the US. This type of research is the only way to make progress in addressing questions relating to low dose effects and thresholds. The danger in the current Commission approach (re: Horizon 2020/LIFE) is that funding is diluted over too many areas which then reduces possibilities for making any breakthroughs on critical issues. This type of initiative would be hypothesis testing at its best, with the critical hypotheses, predictive outcomes, study designs, researchers etc. identified a priori by an oversight committee. Research funded under this initiative should be linked to a key regulatory question or policy option.

- **"Linking science and regulation, by ensuring that the EU legislative framework is adequately implemented and remains fit for purpose;"** While regulatory decision making should always be driven by science, it needs to be transparently recognized that policy options sometimes come into play when science does not yet have all the answers. The Commission should aim to take measures to improve transparency in

decision making and improve the separation of science judgments from those of a political nature. For example, science operates on established principles that are considered 'fact' until new science demonstrates otherwise. Pharmacology, biochemistry etc. operate on the scientific principle of threshold mechanisms and homeostasis. To treat EDs as potential non-threshold is a policy choice. Politics is seen to drive the scientific dialogue on the topic, but there is not enough data to refute the standing scientific principle of biological thresholds. Decisions that come in advance of knowledge, or counter to exiting scientific principles should be clearly stated as such.

- **"Cooperating on the global scene, for example by continuing supporting the work of the Organisation for Economic Co-operation and Development (OECD) in the development of testing methods."** Commission efforts should be focused on prioritized fit for purpose test method development that are immediately useful for regulatory decision making- test method development to identify endocrine disruptors should be prioritized in a systematic manner (need, complexity, extent of basic biological understanding) focusing on apical endpoint testing. This approach should avoid advancing in vitro test method approaches developed in isolation as they are costly, time consuming and not immediately useful for regulatory decision making. Apical test methods should focus on those endpoints considered currently missing (e.g. developmental neurotoxicity) and should be focused on gathering observations that are biologically meaningful and interpretable rather than simply the most sensitive. Additionally, improved computational screening methods based on in vitro approaches should be advanced to allow for tailored endocrine disruptor testing. Endocrine testing should not be a one size fits all approach in order to minimize unnecessary animal testing. The EU should recognize the advances in toxicity testing and the improved understanding of chemical toxicity particular that occurring as a result of traditional high dose testing and should leverage approaches being developed in other parts of the world (US EPA) while recognizing and respecting the limitations the developers have identified. The EU should work at the OECD level to accomplish these aims and moreover, try to avoid overlaps by reflecting the work of the OECD on testing methodologies.

Comments on Better Regulation – Section C of the Roadmap

AmCham EU agrees with the approach outlined but would additionally encourage the Commission to take into account the evidence based approaches outside the EU as well re: OECD, US EPA (see comments above).