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Concerns: Authorisations - Economic feasibility

Agenda Point: 6a

Action requested: For agreement

How the Committee for Socio-Economic Analysis will evaluate economic feasibility in applications for authorisation

Introduction

Based on Articles 60(4) and 64(4)(b) of the REACH Regulation the Committee for Socio-Economic Analysis (SEAC) needs to state in its opinion, if the alternatives to the substance that is applied for are suitable. Economic feasibility is one aspect of this. It is recognised that the evaluation of economic feasibility is intrinsically linked with the evaluation of the other aspect of suitability of the alternatives, i.e. technical feasibility. Usually the more difficult (or easy) it is to substitute a substance the more expensive (or cheap) it is to do this. This note describes how SEAC intends to evaluate economic feasibility as part of applications for authorisation recognising the link with technical feasibility.

Key considerations

The concept of economic feasibility is about changes in net costs, that is, taking account of impacts on both costs *and* revenues of adopting an alternative. This means that economic (and technical) feasibility is judged at the level of the specific product line or supply chain, rather than in terms of a firm's overall operations (which might include activities unrelated to the substance in question). Accordingly, economic feasibility does not equate to an individual firm's ability to afford to pay for any increases in net cost which might be associated with an alternative substance or technique. This is consistent with the principle of equal treatment of applicants in similar situations.

Applying for authorisation can imply costs for firms, which could be significant. These include the application fee and the costs of compiling the application itself, as well as costs associated with uncertainty over the outcome of the process (e.g. impacts on costs of finance, investment planning), and any negative impacts there could be on the firm's public image and reputation from the act of making an application to use a hazardous substance.

These costs represent a financial and economic hurdle to obtaining authorisation. These costs provide an incentive for firms to seek out alternatives, which can substitute for continued use of the substance (thereby avoiding the costs of obtaining an authorisation). These alternatives might cost more for the firm than using the existing substance. However, as long as any increase in costs from substituting for an alternative is less than the expected costs of applying for authorisation, the firm will switch to the alternative and not submit an authorisation application. Hence, the authorisation process is set up in such a way as to encourage the substitution away from substances of very high concern, which is what is envisaged by the REACH Regulation. Thus, REACH Authorisation Title VII recognises that applicants should and will be putting in efforts to switch to alternative substances or technologies.

SEAC's approach to evaluating an application made for authorisation should recognise the push towards substitution but also recognise these existing incentives provided by the authorisation process itself. The approach needs to be based on clear principles, which can provide guidance to potential applicants about how their application might be evaluated. At the same time, these principles need to be capable of being applied on a case-by-case basis

reflecting the particular circumstances of any particular applicant, their associated supply chains and the markets in which he operates.

For these reasons, SEAC does not consider that it would be appropriate to set some non-zero threshold below which any increase in costs associated with an alternative would be judged economically feasible for the applicant to adopt. It would not be possible to set such a threshold in a meaningful way in advance of an application being considered, because there are no agreed criteria for what a reasonable threshold should be.

A practical approach to evaluating economic feasibility

SEAC considers that the two criteria for judging whether an application for authorisation is justified under the socio-economic route – that there should be no suitable alternatives and that the benefits of authorisation should outweigh the risks – should operate in a complementary manner. With this in mind, the following practical approach to evaluating economic feasibility will be adopted.

SEAC will scrutinise the Analysis of Alternatives undertaken by the applicant and provide quality assurance of the estimates of their costs, to ensure that they have been calculated accurately, that appropriate costing and appraisal methodologies have been applied, and that assumptions made about key parameters (e.g. costs of finance, investment periods) are reasonable and well justified.

SEAC will pay particular attention to ensuring that applicants have not overestimated the additional or incremental costs of using an alternative substance or technology, compared with the costs they would face if authorisation were granted. There is no direct economic incentive for applicants to overestimate the costs of alternatives, which might actually be cost-reducing. However, there could be a number of other factors which could result in a tendency for a 'pessimistic bias' against any change from 'business as usual', which could lead applicants to down-play the scope for substitution and exaggerate the difficulties (and costs) of doing so.¹ Moreover, granting an application for authorisation under the socio-economic route in REACH requires the applicant to demonstrate that the risks of continued use are outweighed by the benefits of authorisation – which in large part are likely to comprise the avoided costs of more expensive alternatives. The higher are the costs of the alternatives relative to continued use, the bigger are the benefits of authorisation. Therefore, applicants have an incentive to exaggerate the costs of alternatives in this case, to reduce the risk that the Committees disagree with their assessment, and to gain possibly advantageous authorisation conditions (a clearer case for authorisation might be expected

¹ 'Optimism bias' in this context is a documented tendency for costs and other negative aspects of new projects to be underestimated when there is incomplete information about it, especially in the face of management or institutional desire for that project to proceed. This can be due to unintentional psychological biases (Kahneman, D & Tversky, A (1979) Intuitive prediction: Biases and corrective procedures, in S Makridakis & S C Wheelwright (eds) Studies in the Management Sciences: Forecasting (Amsterdam: North Holland.) or intentional strategic ones (Wachs, M (1989) When planners lie with numbers, Journal of the American Planning Association, 55(4), pp. 476–479.). The UK government's guidance on economic appraisal and impact assessment (the 'Green Book') requires that upwards adjustments be made to estimates of costs, project duration and other relevant parameters to counter this tendency. For more information, see http://www.hm-treasury.gov.uk/green_book_guidance_optimism_bias.htm. 'Pessimism bias' against even changes which would have positive outcomes overall could result from factors such as managerial inertia or risk aversion.

to receive a longer review period, for instance). It should be stressed that there is no evidence that potential applicants will or intend to compile their applications on the basis of any such 'pessimism bias'. However, there is no doubt that an information asymmetry exists between applicants and SEAC in terms of their understanding of the availability and feasibility of alternatives, and which generates the potential for 'pessimistic bias' to affect applicants' estimates of costs but the Committee is alert to the possibility as part of its general scrutiny role.

One way in which 'pessimism bias' could manifest itself is through a tendency not to consider the full range of alternatives to the continued use of a substance. In its evaluation, the Committee will ensure that applicants assess all realistic alternatives, including any additional relevant alternatives identified through the public consultation but not included in the application. This should include the option of 'cessation of use' ('shut down'), since the socio-economic route to authorisation does not guarantee continued use of a substance even if there are no alternatives – it still needs to be demonstrated that the value of the substance in use (the benefits of authorisation) exceed the risks, and this value will always be finite; hence, authorisation under the socio-economic route is never guaranteed and stopping use completely is always an option that needs to be considered.

SEAC will challenge applicants to explain why they are unable to adopt alternatives which evidence (from the public consultation or elsewhere) suggests are used readily by other firms in comparable applications and/or uses. REACH requires the technical and economic feasibility of alternatives to be assessed from the perspective of the applicant, in recognition of the fact that firms' circumstances can differ significantly – in terms of the markets they operate in, their customers' preferences, the technology employed and so on – which means that what is feasible for one firm is not necessarily feasible for another. Information provided on alternatives used by other firms will therefore be evaluated by the Committee within the context of the application in question, and the newly established 'dialogue' between the Committee's rapporteurs and the applicant will be a valuable forum to achieve this.² Nevertheless, it is important that the Committee's scrutiny encourages firms to think about substituting away from hazardous chemicals, particularly in the longer term, and examining how comparable firms are able to use alternatives might help applicants to think about how to plan for the changes they might need to adopt to make an alternative feasible for them.

The assessment of (technical and) economic feasibility is undertaken from the perspective of the applicant because it is from this perspective that it is determined whether an alternative could be adopted or not. However, it is the comparison of the benefits of authorisation with the risks, which determines, whether authorisation or substitution is preferable for society as a whole in any particular case, and it is society's perspective, which should be adopted to demonstrate this in the application. A private perspective involves taking account only of those factors, which impact on the applicant, either directly or indirectly. Adopting a social perspective means taking account of possible impacts, such as the damage to the environment (including the possible impacts related to climate change due to higher energy use) or health of using a substance, as well as the possible benefits for downstream users and consumers, which the substance directly or indirectly offers. Societal attitudes to risk may also be different from private ones³.

² See "Participation of applicants, third parties and stakeholder observers in the application for authorisation process" RAC/23/2012/06 (Rev. 1) SEAC/17/2012/06 (Rev. 1). Available at http://echa.europa.eu/documents/10162/13555/stakeholder_participation_in_afa_en.pdf

³ For instance, a social perspective tends to lead to lower discount rates for investment appraisal. For details, see the ECHA guidance on socio-economic analysis in authorisation,

Possible outcomes of the SEAC's evaluation

If applicants prepare their applications correctly, and base them on all relevant information, the demonstration that authorisation is justified should be valid, and the Committee's opinion should agree with the conclusions and support the granting of the authorisation (subject to any recommendations regarding monitoring, review periods and so on). It is likely, however, that there will be instances where, as a result of the Committee's scrutiny, the conclusions of the analysis in the application change.

For instance, the public consultation might identify an alternative of which the applicant was previously unaware but which is technically and economically feasible for him. The applicant would prefer to adopt this new alternative rather than continue his existing use of the substance, and the updated Analysis of Alternatives will show that authorisation is not the applicant's best option. In this case, it can be expected the applicant would be content that the SEAC's opinion would not support the granting of an authorisation.

This might also be the case if the Committee's scrutiny reveals that the applicant has over-estimated the costs of adopting an alternative. In other words, the applicant would find out that there is in fact an alternative which is economically feasible for him such that he prefers to adopt it rather than continue with the authorisation application⁴.

SEAC's evaluation might reveal that the cost of adopting an alternative has been over-estimated, but that the alternative remains economically infeasible for the applicant. What impact this has on the conclusions of the analysis (and the Committee's opinion) will depend on how the revised estimate of the cost of the alternative compares with the assessment of the risks associated with continued use of the substance. If the existing risks are relatively limited, and/or the reduction in the costs of the alternatives is small, the benefits of authorisation might continue to exceed the risks, and the conclusion that authorisation is justified will be unchanged.⁵

However, risks of continued use could be relatively high and/or the reduction in the costs of the alternative(s) (and hence the benefits of authorisation) could be significant, in which case the revised conclusion of the analysis might be that authorisation is not justified, and the Committee issues a negative opinion which does not support the granting of the application.

available at http://echa.europa.eu/documents/10162/13643/sea_authorisation_en.pdf.

⁴ This might be unlikely in practice but is possible if simple mistakes have been made, for instance.

⁵ Note that, as there is a theoretical incentive for applicants to exaggerate the costs to them of adopting an alternative, so also there is an incentive to exaggerate the social costs of an alternative (as this increases the benefits of authorisation) as well as to downplay the risks of using the existing substance, both of which will need to be checked for as part of Committee scrutiny of the application. It should be stressed again that there is no evidence that applicants will behave in this way, however.