

Cefic additional remarks and comments to the Art. 13 Forum Workshop on the next BREF review cycle

As suggested by DG ENV in the Art 13 Forum workshop on June 12, 2020, Cefic would like to use the opportunity for a submission of more detailed comments and arguments.

a) No intermediate BREF additions in between review cycle (see also 4.6 of the Background Paper)

During the Forum Meeting on June 12th and also at other occasions (e.g. the HAZBREF meetings) the notion was raised to have 'intermediate' BREF reviews e.g. in order to better consider new emerging techniques in the BREF process or to review only certain sections. But emerging techniques are not necessarily available techniques and techniques proven to work in one process might have to yield the same results in a different chemical process. For example during the site visits for the WGC BREF at the Evonik site in Essen, Germany an example of an abatement equipment was shown which, though proven technique was claimed by the vendor and the technique was available, this technique was not suitable for the process at issue. At the visit at Arlanxeo in Zwijndrecht a bio-treatment unit was shown which underwent several years of continuous improvement before the 'available' technique became a 'working' technique.

For industry security of planning is paramount. As investment cycles are much longer than just three to four years (after all, planning, purchasing of equipment, building and starting a unit take years) and hence a too frequent change of a BREF interferes with these cycles.

As seen in and claimed at several instances, also member states need more than four years for implementation of BREF requirements in their legislation because of lack of resources.

Besides economic factors, matters of process & plant safety must not be overlooked. Each chemical unit undergoes several safety evaluations during the planning, the design and the building phase followed by start-up safety reviews. The risk evaluation during the planning phase alone is an extensive process often stretching over several months, if not years. The risk evaluation itself must be based on reliability (=likelihood of a failure) data of the processes and equipment involved. Such data are usually not available for emerging techniques and can only be obtained by scaling up and improving emerging processes whilst determining potential safety and reliability issues.

And finally: A BREF is complex document and we strongly suggest reviewing a BREF as a whole (and not in parts) in order to avoid inconsistencies within one document and not to jeopardize the integrated approach.

In short: while we acknowledge that the discussion and evaluation of new techniques during the reviews of a BREF is always advisable in order to find the best and state-of-the-art solutions, they must prove to work. Large chemical sites are not the right place for a 'try-and-error' approach when implementing allegedly novel technique.

b) Scope of future BREFs: Addition of more and more chemicals to the list of KEIs (Background Paper Section 4.5.)

Each BREF review starts with an extensive front-loading phase. This front-loading and pre-selection of relevant substances has significantly improved during the past five years as DG ENV and the JRC have introduced new methodologies. One is the concept of four parameters introduced by DG ENV during the Art. 13 Forum in October of 2015, the second is a methodology introduced by Ricardo in behalf of DG ENV. As shown for four BREFs during the past two years, this method allows for a screening of a large number of candidate substances with comparably little effort for the entire Technical Working Group (TWG). Cefic supports this approach and has suggested at several instances that it should be augmented by real data (e.g. emission reports), and not be mainly based on a research of literature as it is the case today.

We suggest refraining from using the ECHA method as provided for in the HAZBREF project as this mixes matters of occupational health, safety, toxicity and the USE of chemicals, whereas IED focuses on relevant emissions from industrial sources. As we had stresses for the HAZBREF project, the use of a substance in a chemical process does not automatically lead to an emission, as substances in such processes usually undergo a transformation into new products.

We like to caution that in the end both the BREF team and the JRC must be able to handle and evaluate the data collection for the list of substances agreed upon in the Kick-Off Meeting. Here two conflicting interests have to be balanced well: a) the strive to include more and more substances and b) the goal to finish the BREF in a reasonable timeframe. This balancing act was for instance also stressed by DG ENV and the JRC during the HAZBREF conference in Helsinki early 2018. Any additional evaluation method (as e.g. mentioned above) can require more and additional experts, which could increase the size of the TWG. Both the lack of human resource and time constraints however have been cited as limiting factors for the future BREF reviews by Germany during the workshop on June 12th.

The WGC BREF for example started with a list of 66 candidate substances out of which 28 were selected during the Kick-Off Meeting. Several substances were selected with the intention to collect data and to later see whether sufficient data are available. Though the data collection included the entire chemical industry in Europe, the number of data points reported for several substances remains low and is oftentimes limited to a few selected sectors or production processes for which these substances really matter.

One reason lies in the nature of the chemical industry itself, where the production of many substances like monomers, intermediates or plastic materials takes place in world-scale plants with production capacities of more than 100.000 ton/year (and up to 1 mio ton/year). In consequence only a very limited number of plants (less than 10 in Europe), operators and member states are relevant for consideration.

From industry perspective the requirements of competition law (globally) are of increasing importance during meetings of the TWG and exchange of data.

Several stakeholders often request an increase of monitoring in order to produce more data for the next review of a BREF. Here again we like to note that monitoring has to fulfill a clear purpose and it must be clear before monitoring begins what to use the results for. Monitoring in the end is expensive and, in many instances, specific monitoring equipment is required for different types of substances. Besides, the actual monitoring, also the upfront planning of monitoring is essential and cumbersome as it must fit to the production planning and emissions must be measured at a representative point in time (and, e.g. WGC BREF at the highest load). As discussed in the CEFIC paper on batch processes for D1 of the WGC BREF, this is a major issue for batch processes.

Monitoring just for the sake to ‘see whether there is something out there’ cannot be a efficient approach. Monitoring per se does not automatically lead to a reduction of emissions. Also, in many cases no standards are available (especially for less common substances aside from NO_x, SO_x, Dust and the likes). This however means that results are of limited comparability. In the end, operators have to comply with AELs set by a BREF. If however the actual emissions cannot be monitored properly or results are not comparable, then legal adherence to the requirements became a challenge. The development of standards does not keep pace with setting lower BAT-AEL and therefore the measurement uncertainty increases.

c) No review of the OFC/POL/SIC BREF (Section 4.2. of the Background Paper)

In the Art. 13 Forum in October 2015 it was agreed to create a BREF on emissions to air (the WGC BREF) in addition to the existing BREF on air and water (CWW). As to our recollection one of the goals was to speed up the BREF process and to see at a later point in time whether the BREFs OFC/SIC/POL would still be needed. The CWW BREF covers the entire chemical sector, whilst the WGC – as agreed by the TWG – covers all sectors except a portion covered by the LVOC and many processes of the LVIC BREFs, which were not included as agreed during the Kick off Meeting(s) and the Art. 13 Forum in Dec. 2017. The scopes of the BREFs OFC/SIC/POL however were clearly included. Are we now going to decide upon the future of these BREFs before the WGC BREF is even finished?

If now these BREFs would undergo another revision, the concept discussed in several meetings as indicated above and agreed upon in the two kick off meetings for the WGC BREF, another data collection would start for sectors yet to be defined and potentially excluded from or overlapping with the scope of the WGC BREF. Already today the ‘landscape’ of chemical BREFs is everything but clear and easy to understand. The CWW BREF already covered diffuse emissions, the WGC D1 now intends to cover diffuse emissions as well. One line of demarcation between processes covered by LVOC and WGC is based on the question whether AELs exist for a process in the LVOC BREF or whether or not a process is covered by a sector of the LVOC or a thumbnail chapter. Reviewing the OFC/SIC/POL BREF will almost certainly lead to a data collection of substances different from those collected for the WGC and CWW BREF. Overlaps are almost guaranteed, and it will be very difficult for both operators and permitting authorities to decide which part of a production process or – even worse – production site falls under which BREF and which AEL from which BREF eventually ‘rules’.

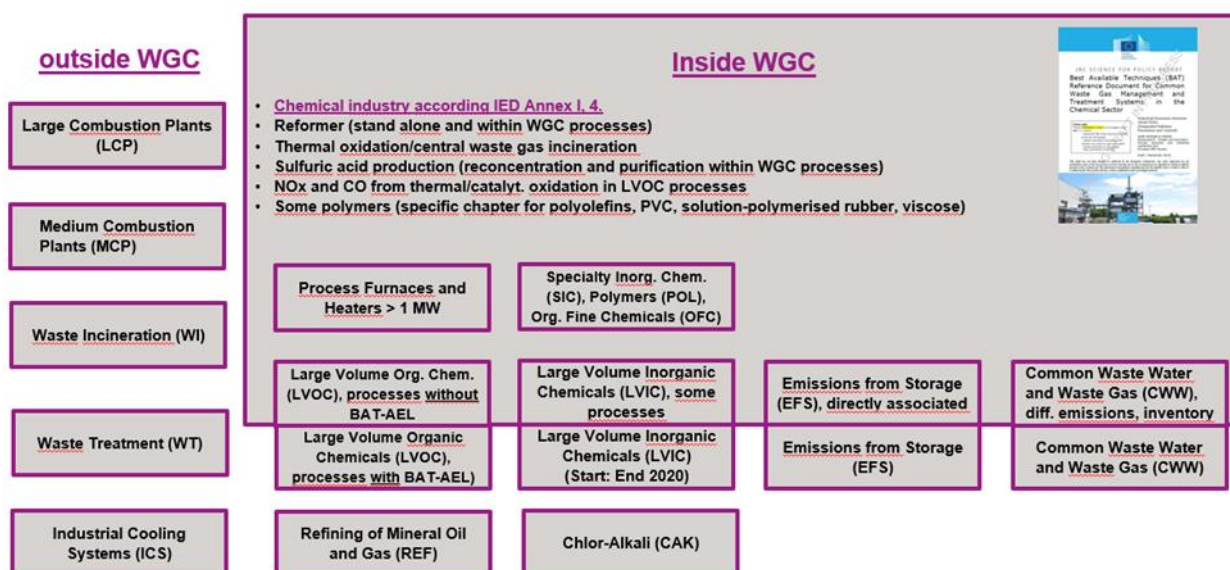


Diagram 1: BREFs of relevance for the chemical industry in the context of the WGC BREF (Waste Gas Treatment in the Chemical Sector)

Finally, and with respect to emissions to water and waste issues, CWW BREF applies to OFC/SIC/POL processes. Especially, CWW BREF addresses BAT-AEL for wastewater. So OFC/SIC/POL processes are already covered by this BREF.

In the Art. 13 Forum in December of 2017, it was discussed that at the end of the day four ‘chemical’ BREFs would remain:

- 2 “horizontal” BREFs: for water (CWW) and air (WGC)
- 2 BREFs for large volume productions: for organic (LVOC) and inorganic (LVIC).

This seemed pragmatic, but are we now deviating from this approach again?

Finally, one should also not lose sight that e.g. the EFS BREFs also will have a bearing on the chemical sector (e.g. the EFS BREF and others) and as such also cover aspects of OFC/SIC/POL.

In short: the situation of the chemical BREFs is already highly complex and reviewing the BREFs on OFC/SIC and POL will not help improving the situation.

d) Circular Economy / Energy Efficiency (Section 4.1 of the Background Paper)

- Cefic believes that the IED already provides an efficient framework for the objectives of the European Green Deal as it already addresses circular economy and energy efficiency aspects.
- This was widely acknowledged by many stakeholders of the Art. 13 Forum meeting where several provided examples of aspects already fitting into the IED without any further change of it.
- The Seville process can cover these aspects according to the stipulations of the BREF Guidance but does not yet make use of them to the fullest extent possible. Already today the integrated approach – cross-media effects on emissions and resource use – can cover the aspects of CE but this needs to be followed more systematically when selecting Best Available Techniques (BATs).
- One further aspect for improvement could be to incentivize the use of by-products or secondary raw materials when setting BATs and BAT-AELs (associated emission levels). Today the focus of the Seville process is to strive for lowest possible emissions. However, when non-virgin materials are used, emissions might be different and we suggest to consider this as an option when determining the AELs.
- The core legislation addressing circular economy however is laid out over specific product and sector legislation, the Waste Framework Directive and REACH under which Member States are required to follow key principles of resource management, including the waste hierarchy (the WT BREF in fact avoids any definition of ‘waste’ and rather focuses on the reduction of emissions – which is the essence of the IED). Via the BREFs, the IED could further be instrumental to an enhanced circular economy and as such could also indirectly contribute to an enhanced mitigation of CO2 emissions.
- With regards to a possible BREF on ‘circularity’: We believe that aspects of circular economy are very specific with regards to the processes and production looked at. Hence including such aspects into the ‘vertical’ (sector/product specific) BREFs or chapters of it can lead to more tangible results than ‘overarching’ and hence more and potentially too generic BATs and AELs in a ‘horizontal BREF’. Also the IED looks at the plant operations and their impact on the environment but not on the entire value chain.

e) No overlap of the BREF review cycle with the ongoing IED review

As outlined in our paper sent by William Garcia to Aneta Willems on May 28, 2020 we caution not to mix up the IED review and the discussion on the next BREF cycle. Beginning in 2018 DG ENV together with a large group of stakeholders from Member States, NGOs and industry embarked to an extensive collection of responses looking at the 'performance' of IED. In the meantime, an inception impact assessment has begun on a possible review of the IED. Given the questions raised in the background paper for the Art. 13 Forum on June 12th, 2020 we are concerned that several topics are already beginning to mix up.

The topic at issue – the discussion of the next BREF review cycle – targets to define which BREFs will be reviewed now and which ones later. For those reviewed under the current version of the IED (e.g. the upcoming review of the LVIC BREF(s)) must be reviewed (and finished!) according to the legislation in place since 2010, otherwise the results would not be consistent between the different BREFs. Here we like to remind that especially in the chemical sector large production sites are 'governed' by several BREFs at the same time. This situation will be exacerbated if the BREFs on SIC/OFC/POL will be reviewed. In addition, the review of the IED and possible changes of it will very likely come in the middle of the review of these BREFs. As outlined above, an answer to the question which BREF applies for which part of the chemical sector is already a difficult one. If now a 'new' IED comes during the process of ongoing reviews (chemical) BREFs, the situation can become unmanageable.

One negative example is the LVOC BREF which was begun under the IPPC and finished under IED and in the end took eight years to finish.

f) CWW BREF (Section 4.4. BP, Workshop 4b in the Questionnaire)

During the Art. 13 Forum on June 12th, a stakeholder raised the point to review the CWW BREF. We strongly oppose this approach. The CWW BREF was issued in June 2016, so the 4-year period for implementation has just ended. Besides, this BREF is not fully implemented everywhere yet (for instance in FR, as it is not entirely clear in all cases which is the 'main activity' according to IED which triggers the implementation of a BREF) or only very recently (June 2020, Germany)

As said before, investment cycles in the industry are spanning over several years. It is also known that large chemical clusters are undergoing shutdowns only every 5 years. Requesting a new review when the implementation of the results of the last one is just finished is in strong disagreement with the goals of the BREF guidance and the IED.

During the Art. 13 workshop on June 12th, many stakeholders were supporting to keeping the sequence of BREF reviews as it is today.

Nevertheless, once the WGC BREF is approaching its finalization, potential overlaps with the CWW must be carefully eliminated. The CWW only lists available techniques and does not provide any BAT AEL for waste gas treatment. Once the WGC is final this should result in the elimination of all waste gas related parts of the CWW BREF, and after having done so, will result in a set of two horizontal BREFs for the chemical sector: Waste Water Treatment in the Chemical Sector (WWC?) and a Waste Gas Treatment in the Chemical Sector (WGC).

g) Question 4.5 of the Background Paper

Concerning the scope of the LVIC vs the GLS BREF with regards to sodium silicate. Cefic would like to submit the following, additional comment:

As it was concluded by the European Commission on 2018 after a proposal from the EIPPCB, sodium silicate better fits in LVIC-S BREF due to its production characteristics. There are different production routes for sodium silicates and not all fit into the GLS BREF, whilst all are covered by the LVIC BREF.



BREF Workshop Call
for feedback - Ceficfin

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About Cefic

Cefic, the European Chemical Industry Council, founded in 1972, is the voice of large, medium and small chemical companies across Europe, which provide 1.2 million jobs and account for 16% of world chemicals production.