SUPPORT TO THE EVALUATION OF REGULATION (EC) NO 1005/2009

STAKEHOLDER EVENT

Tuesday 27th November, 2018

RAMBOLL VU UNIVERSITY AMSTERDAM

AGENDA

I. Welcome and introduction

II. Methodology

III. Presentations of the draft findings from the *"Support study for the evaluation of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer"* by the consultants

Session 1

1. Results: Effectiveness, Efficiency, and EU Added Value of the Regulation
2. Questions and feedback

Session 2

1. Results: Coherence and Relevance of the Regulation
2. Questions and feedback

IV. Conclusion by the European Commission

METHODOLOGY

PURPOSE OF THE STUDY

- Support the Commission in its evaluation of Regulation (EC) No 1005/2009 to find whether:

Effectiveness
- the objectives of the Regulation have been effectively achieved,

Efficiency
- the different measures of the Regulation are efficient such that the benefits are achieved at reasonable costs and the intervention provides a clear, stable and predictable regulatory framework,

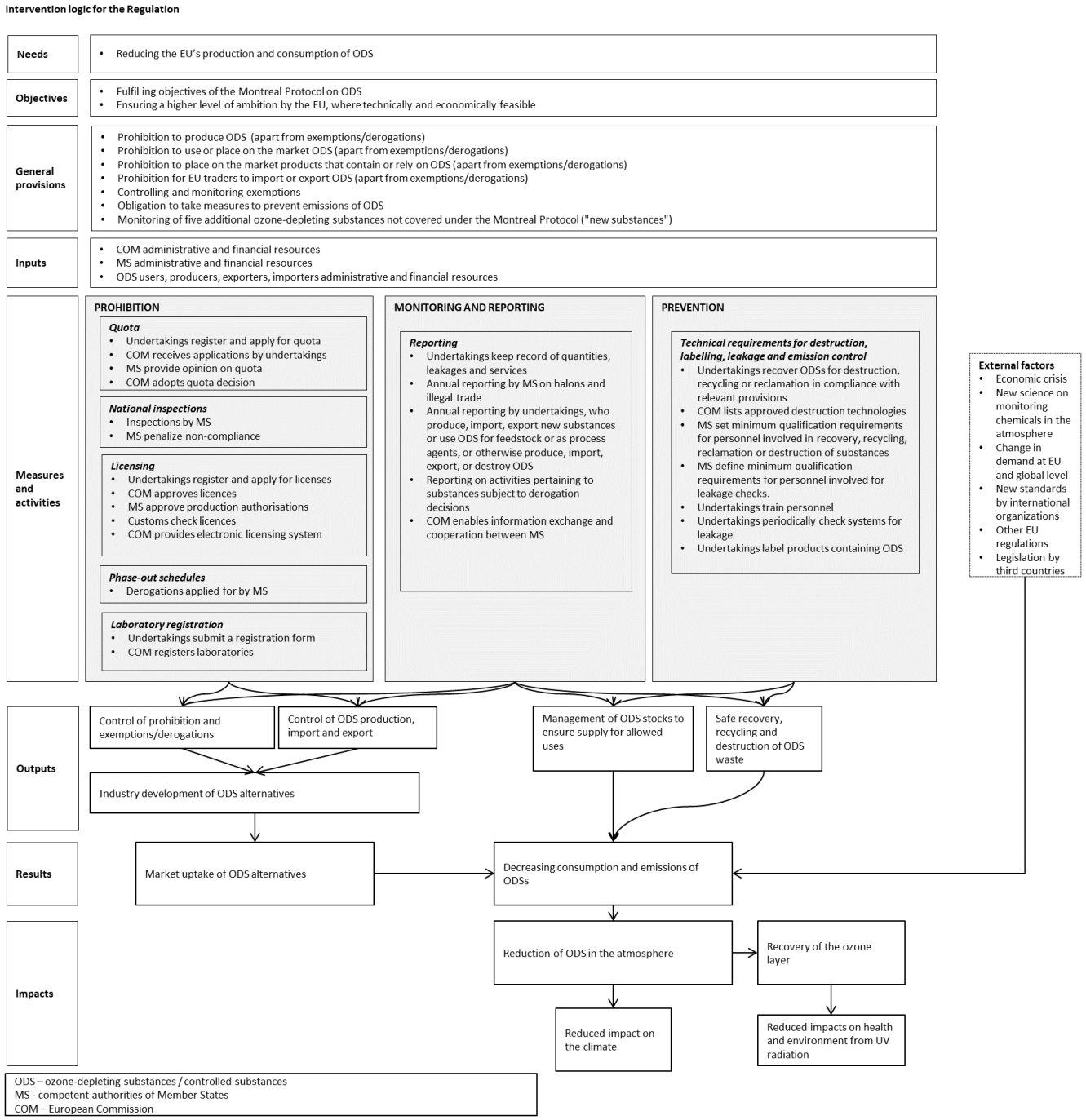
EU Added Value
- there is added value of having an intervention at EU level as compared to having national interventions,

Coherence
- any gaps in the Regulation exist and any overlaps with other European or international interventions are present, and,

Relevance
- the Regulation is still relevant, including if the provisions permitting exemptions are still relevant.

EVALUATION FRAMEWORK – INTERVENTION LOGIC

An intervention logic is a central tool in theory-based evaluation. The goal of the intervention logic is to reproduce the expected causal links between the Objectives and Actions of the ODS Regulation, and the expected Outputs, Outcomes and Impacts.



STAKEHC

EVALUATION FRAMEWORK – EVALUATION QUESTIONS

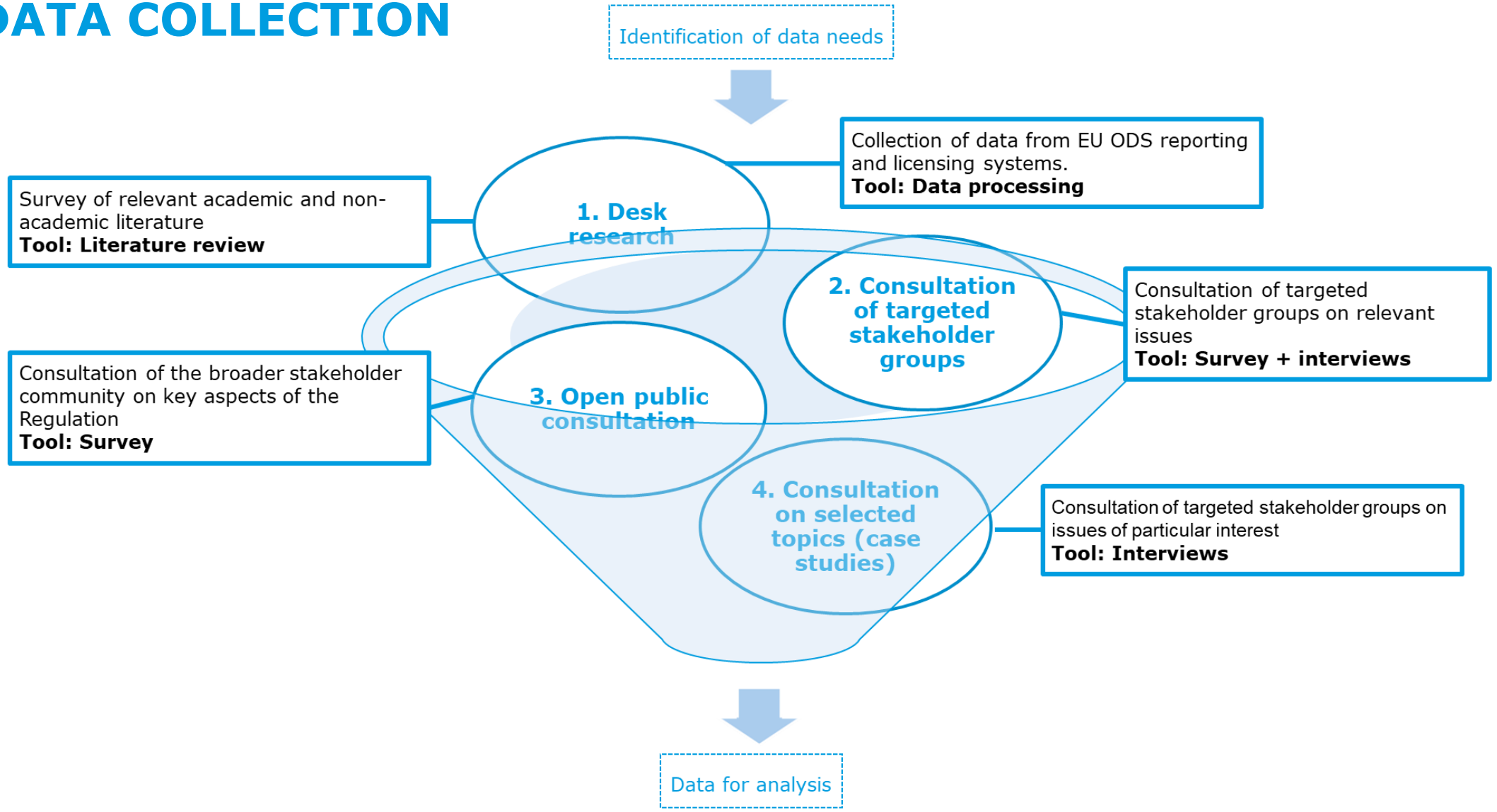
Criterion	Question
Effectiveness	Q1. To what extent have the objectives been achieved?
	Q2. What factors had a positive or negative influence on the achievements observed, and how?
	Q3. What have been the most prominent qualitative and quantitative effects of the Regulation? To what extent can these effects be credited to the Regulation?
Relevance	Q4. To what extent is the intervention still relevant? In particular, are the provisions permitting exemptions still relevant?
	Q5. How well is the Regulation adapted to technological and scientific developments? In particular, to what extent alternatives to ozone-depleting substances became available?
Efficiency	Q6. What are the costs and benefits for different stakeholder groups?
	Q7. To what extent are the costs associated with the Regulation proportionate to the benefits achieved?
	Q8. To what extent have the measures been efficient? Are there any unnecessarily complicated or burdensome aspects and areas of excessive costs?
	Q9. What are the reasons and magnitude of any identified inefficiencies? What could be the expected cost savings if these inefficiencies were absent?
Coherence	Q10. To what extent is the Regulation coherent with related interventions both at EU and international level?
	Q11. To what extent is the Regulation's structure and content coherent?
EU Added value	Q12. What is the additional value resulting from the Regulation compared to what could reasonably have been achieved by Member States at national level?
	Q13. What would be the most likely consequences of withdrawing the Regulation?

MEASURES OF THE REGULATION

The evaluation considers the following measures:

1. Licensing requirements
2. Quota limitations
3. Registration requirements for laboratories
4. Reporting requirements
5. Phase-out schedules
6. National inspection obligations
7. Technical requirements for destruction
8. Technical requirements for labelling (not included)
9. Technical requirements for leakage and emission control

DATA COLLECTION



BASELINE FOR ANALYSIS

Status quo in 2009 and contribution of the Regulation since then:

- ODS had already been largely phased out: more than 99% of its baseline consumption and production.
- In a number of areas the phase-out not completed:
  - HCFC production.
  - HCFC use and trade in products and equipment.
  - Some ODS use types as halons in civil aviation, feedstock/process agent use, laboratory use etc.

However, ozone policies extend beyond this time period.

- Long successful history which must be safeguarded.
- Environmental benefits larger than just achieving Montreal Protocol implementation and showing more ambition in a few areas.

PRESENTATION OF THE DRAFT STUDY FINDINGS

Effectiveness, Efficiency and EU Added Value of the Regulation

EFFECTIVENESS

Evaluation questions:

Q1. To what extent have the objectives been achieved?

Q2. What factors had a positive or negative influence on the achievements observed, and how?

Q3. What have been the most prominent qualitative and quantitative effects of the Regulation, and to what extent can these effects be credited to the Regulation?

Methodology used:

- Collecting evidence from reported and statistical data
- Analysing results from consultations (stakeholders and public)
- Literature review

RESULTS: EFFECTIVENESS (1)

Q1. To what extent have the objectives been achieved?

Background:

- By 2010, much of the ODS phase-out had already been realized.
- Challenge: to continue the substitution and to control the (limited) remaining uses appropriately as well as preventing backsliding.

Objectives of the Regulation:

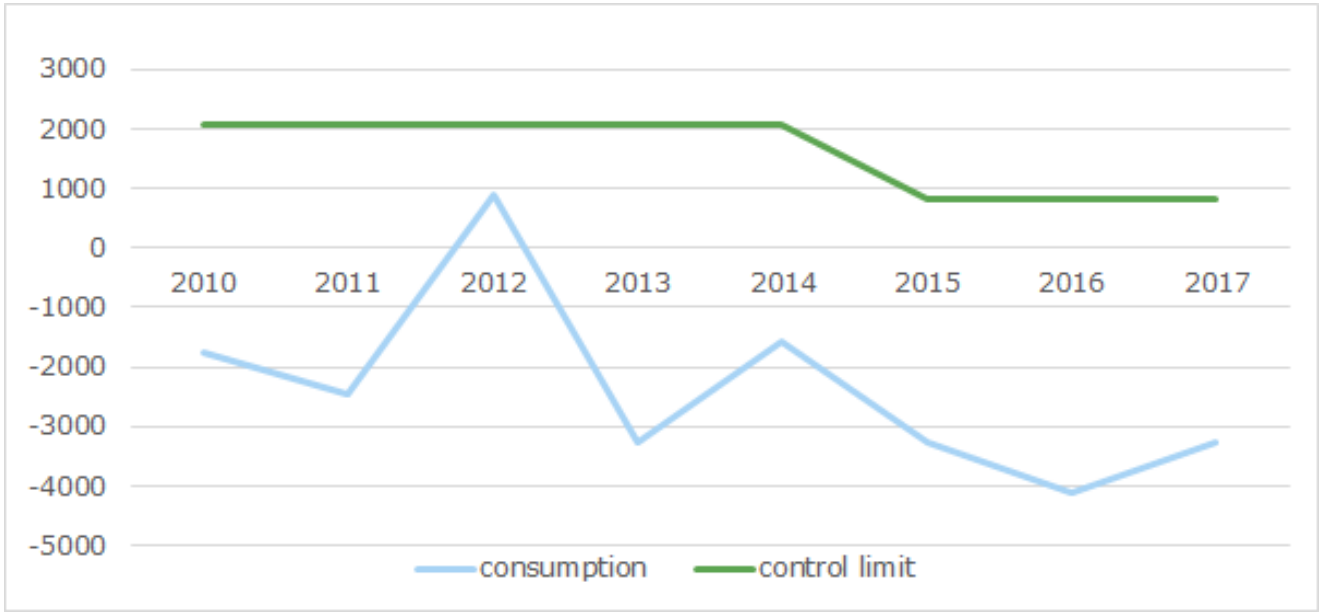
1. Continue implementing the EU's obligations of the Montreal Protocol as adapted in 2007 and strengthen enforcement;
2. Going beyond these obligations, a.o. by tackling ODS not yet controlled under the Montreal Protocol.

RESULTS: EFFECTIVENESS (2)

Implementing the EU's obligations of the Montreal Protocol

- Consumption of ODS well below MP control limit

Figure: Consumption of ozone-depleting substances in the EU, 2010-2017 (in ODP tonnes).



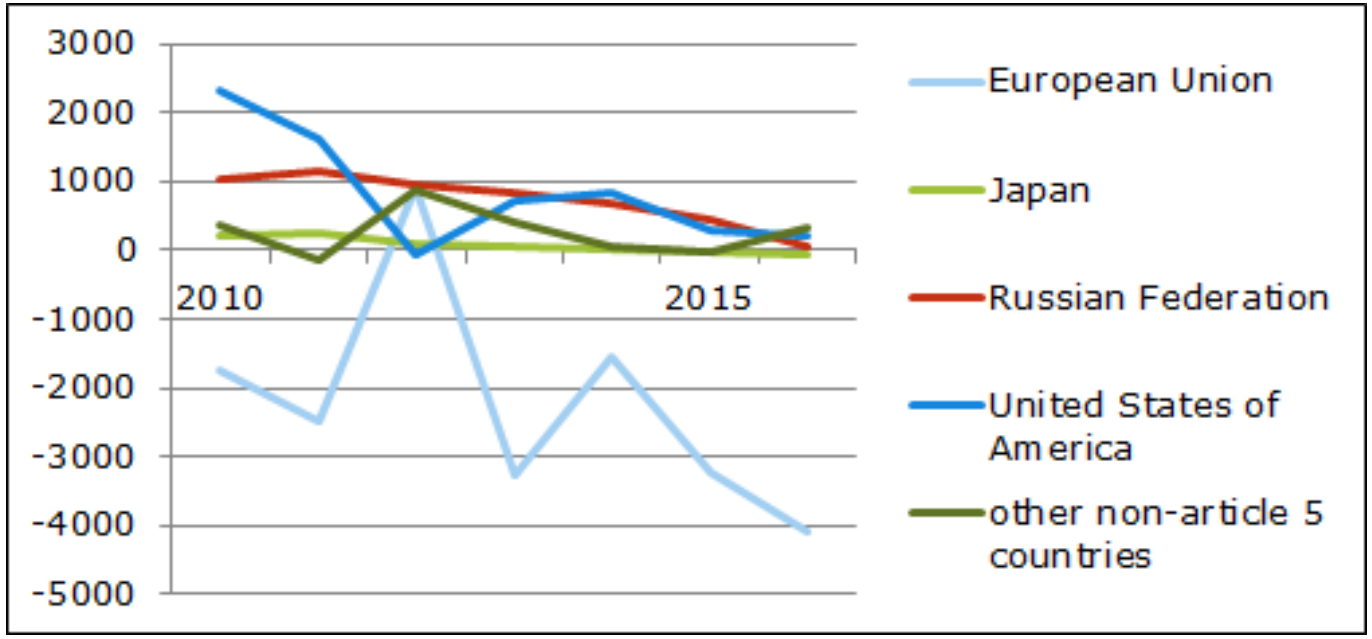
- HCFC phase-out completed for bulk and equipment, production by 2020
- No non-compliance cases with MP

RESULTS: EFFECTIVENESS (3)

Going beyond the obligations of the Montreal Protocol

- Phase-out schedules (methyl bromide, halons, HCFCs)

Figure: Consumption of ozone-depleting substances, in ODP Tonnes, 2010-2016.

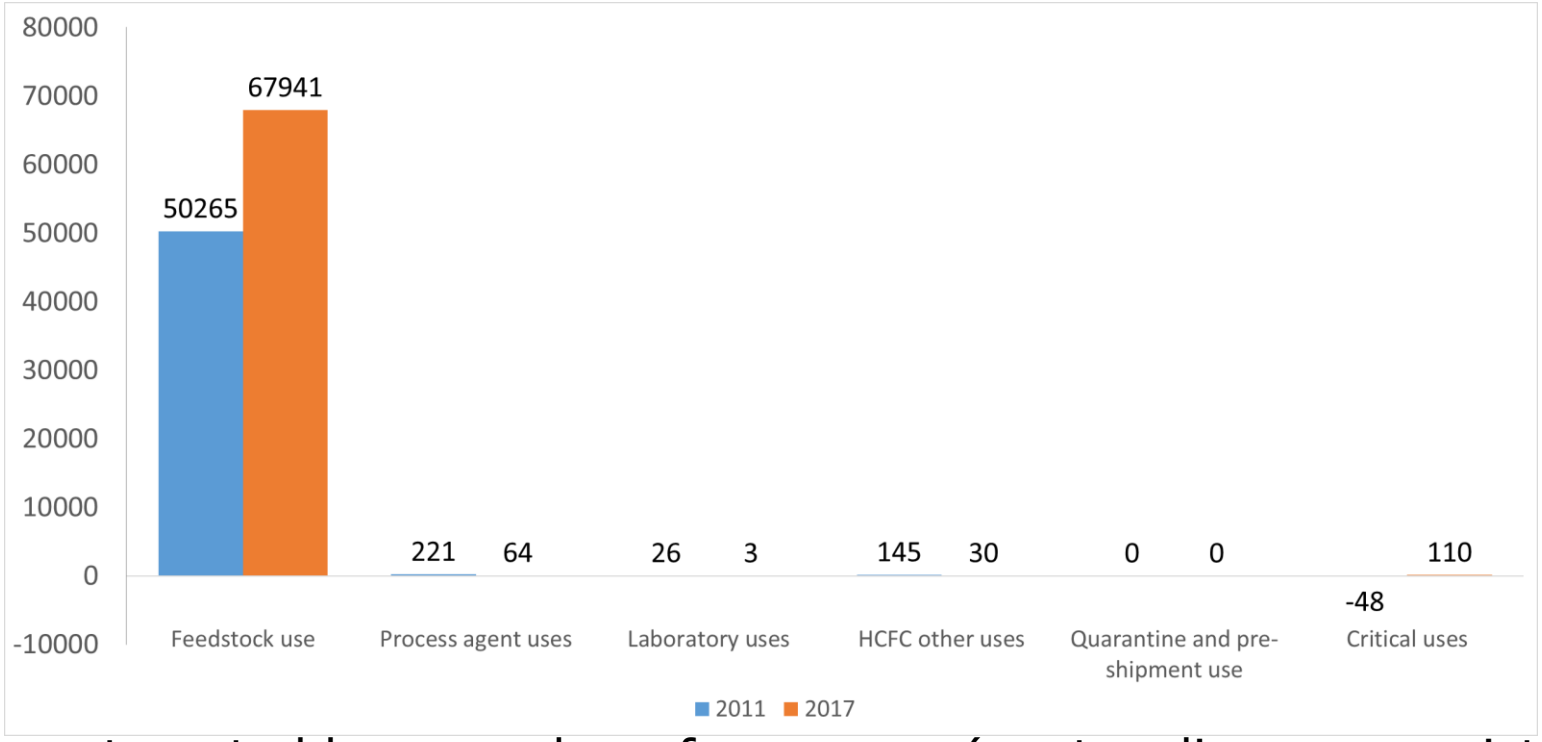


- Very limited need for derogations
- Wider scope of monitoring (e.g. including new substances)

RESULTS: EFFECTIVENESS (4)

- ODS continue to be used for exempted uses and in sectors not explicitly controlled by Montreal Protocol, in particular as feedstocks

Figure: Quantities of ozone depleting substances used in the EU for exempted uses in ODP tonnes, 2011 and 2017.



- These uses are targeted by a number of measures (quotas, licences, registration, reporting...) but which have not resulted in large reductions of ODS used in these fields.

RESULTS: EFFECTIVENESS (5)

Q2. What factors had a positive or negative influence on the achievements observed, and how?

Internal factors (measures):

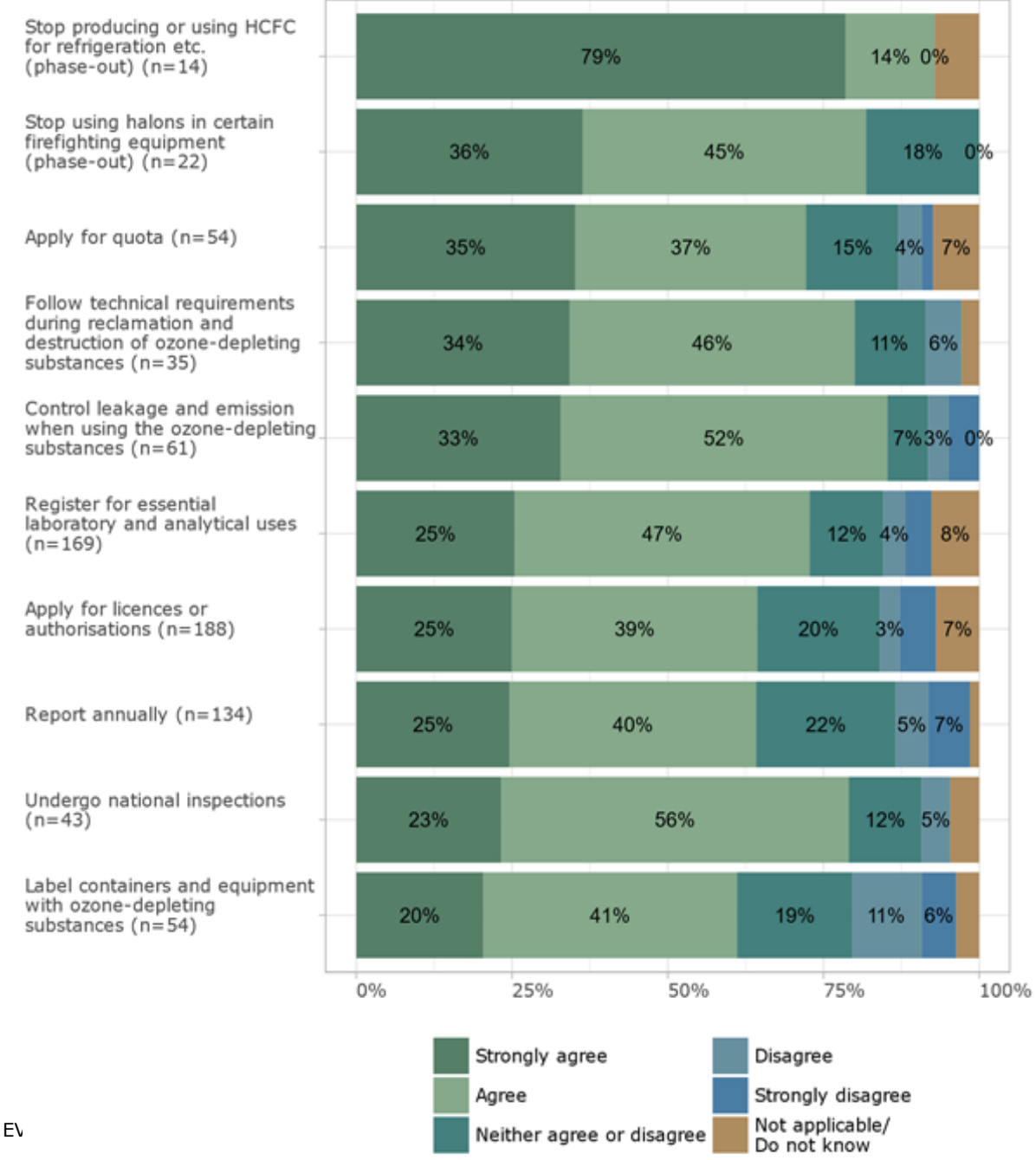
- Majority of stakeholders agrees for all 9 measures that they have contributed to reduction of production and consumption of ODS
- Most effective measures according to stakeholders:
  - HCFC phase-out
  - Inspections and registration (authorities)

External factors:

- Minority of stakeholders think that external factors played a role
  - Undertakings: economic situation; market
  - Authorities: R&D, other legislation, incentives
  - Public: development of alternatives, awareness, other regulations

RESULTS: EFFECTIVENESS

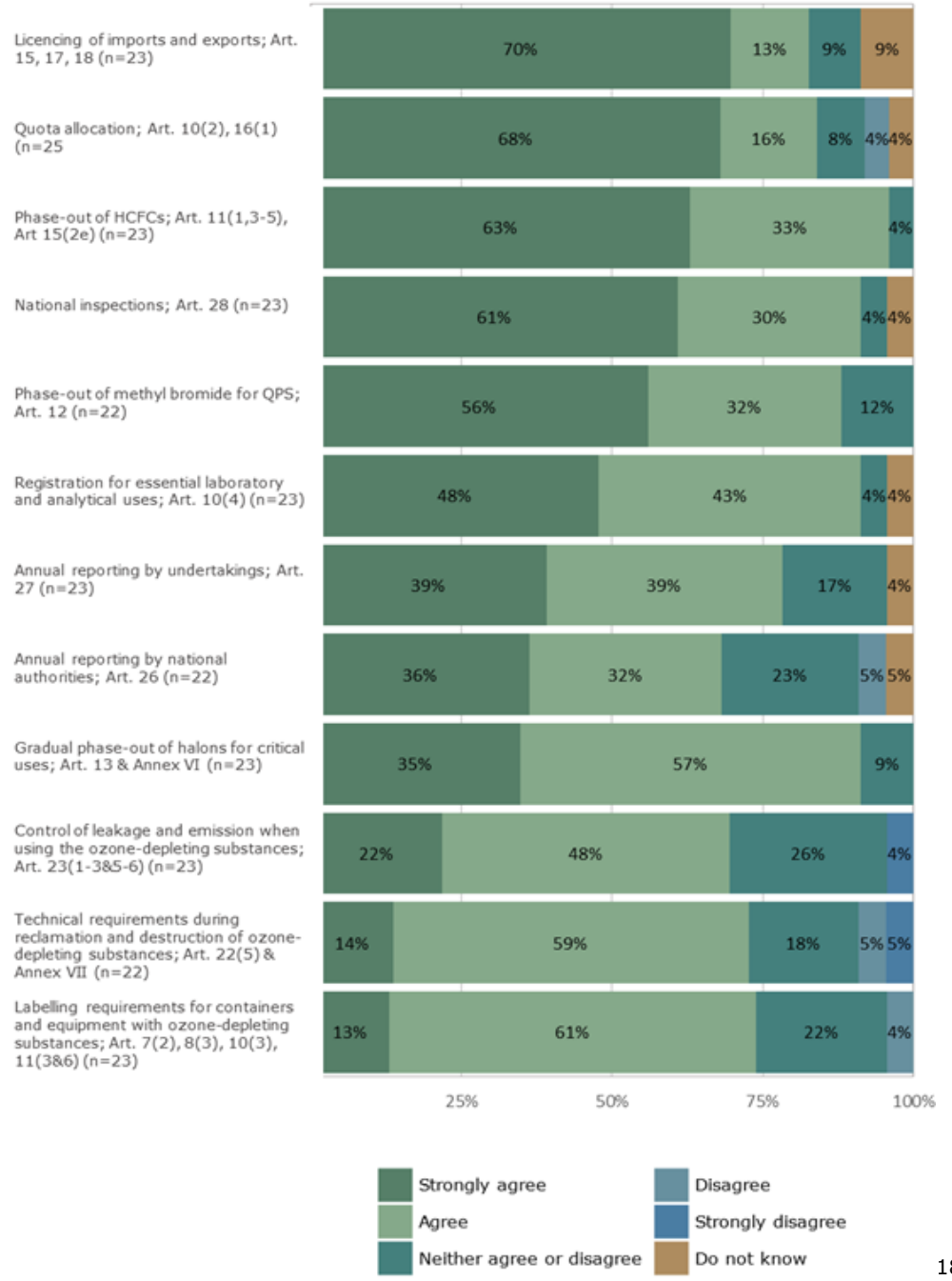
Survey to undertakings:
To what extent do you agree that the following measures contribute to a better control of the use of ozone-depleting substances by your undertaking (e.g. to a reduction of the amount of these substances your undertaking deals with)?



Source: Ramboll based on the results of the targeted consultation of undertakings on Regulation (EC) No 1005/2009 on substances that deplete the ozone layer.

RESULTS: EFFECTIVENESS

Survey to competent authorities of the Member States:
To what extent do you agree that the following measures of the Regulation have contributed to reducing the production and consumption of controlled substances?



Source: Ramboll based on the results of the targeted consultation of the competent authorities of the Member States on Regulation (EC) No 1005/2009 on substances that deplete the ozone layer.

RESULTS: EFFECTIVENESS (6)

Q3. What have (in addition to reduced ODS consumption) been the most prominent qualitative and quantitative effects of the Regulation, and to what extent can these effects be credited to the Regulation?

- Alternatives have been developed and introduced, but progress is more difficult in specific application areas (e.g. critical uses of halons)
- Emissions have decreased; role of Regulation unclear
- Recovery, recycling, reclamation, destruction:
  - Large quantities destroyed but large part is unintentionally produced ODS (by-production)
  - Banks of ODS (especially in insulation foams) remain a concern
  - Effectiveness of Regulation in this area is unclear

CONCLUSIONS: EFFECTIVENESS

Conclusions:

- Objectives of the Regulation have been achieved.
- Effectiveness mainly related to internal factors (measures of the Regulation); role of external factors less prominent.
- Limited evidence of Regulation's impact on emissions, leakages, management of banks.

Please also provide your written feedback to questions in the summary paper.

EFFICIENCY

Evaluation questions:

Q6. What are the costs and benefits for different stakeholder groups?

Q7. To what extent are the costs associated with the Regulation proportionate to the benefits achieved?

Q8. To what extent have the measures been efficient? Are there any unnecessarily complicated or burdensome aspects and areas of excessive costs?

Q9. What are the reasons and magnitude of any identified inefficiencies? What could be the expected cost savings if these inefficiencies were absent?

Methodology used:

- Benefits and costs information collected from stakeholder consultations (survey and phone interviews).
- Analysis of administrative costs based on Standard Cost Model approach.
- Differentiation of 'incremental' costs from Regulation (including implementation choices to improve enforcement) and costs from core requirements of the Montreal Protocol.

RESULTS: EFFICIENCY (1)

Q6. What are the costs and benefits for different stakeholder groups?

Costs from the Regulation:

Cost category	Description[1]	Measures
Administrative costs	Costs of complying with information obligations.	• Licensing requirements • Quota limitations • Registration requirements for laboratories • Reporting requirements • Labelling requirements
Substantive compliance costs	Costs to the target group of complying with regulation other than fees and administrative costs, such as costs of complying with restrictive measures for reducing ODS consumption and emissions.	• Phase-out schedules • National inspection obligations • Technical requirements for destruction • Technical requirements for leakage and emission control
Implementation and enforcement costs	Costs directly borne by public authorities in implementing, administering and enforcing regulatory requirements.	• All measures (Member States and EU competent authorities)
Hassle costs	Costs of waiting for licenses and authorisations.	• Licensing requirements • Quota limitations

[1] Better Regulation Toolbox, Tool #59 METHODS TO ASSESS COSTS AND BENEFITS.

RESULTS: EFFICIENCY (2)

Q6. What are the costs and benefits for different stakeholder groups?

Costs from the Regulation to undertakings:

Table of costs per unit for administrative measures, in hours per year.

Time* (person-hours per year)	Apply for a licence (ODS Licensing System)	Apply for a quota (ODS Licensing System)	Register once for essential laboratory and analytical uses (labODS registry)	Yearly report (BDR)
Number of respondents	(N=9)	(N=6)	(N=3)	(N=15)
Average	1.1	5.4	3.5	45.5
Maximum	3.0	16.0	8.0	225.0
Minimum	0.1	0.3	0.5	1.0
Median	1.0	2.8	0.5	16.0
Average cost*	**37 €**	**191 €**	**124 €**	**1 608 €**

* Time given by undertakings.

Note: Not all costs are incurred by all undertakings.

* Average costs based on **mean hourly wages in the EU in 2014 of €35.3**, adjusted to 2014 prices and using an average of ISCO 1 and ISCO 2. Includes non-wage labour costs, plus 25% overhead costs. Source: ESTAT: Structure of Earnings Survey - NACE Rev 2: B to S not O.

RESULTS: EFFICIENCY (3)

Q7. To what extent are the costs associated with the Regulation proportionate to the benefits achieved?

<u>Two comparative approaches:</u>

1. **Assessment of 'incremental' costs of the Regulation, compared to Montreal Protocol.**
   - **Regulation aims to effectively enforce Montreal Protocol, introducing certain implementation choices, for example:**
     - Licensing additionally covers products/equipment, use of ODS on ships.
     - Quota limitations to support phase-outs.
     - National inspections obligations, in line with EU environmental principles.
   - **Regulation goes beyond Montreal Protocol by seeking additional emission reductions, for example:**
     - Earlier phase-outs (HCFC use, MB use in quarantine and pre-shipment)
     - Monitoring new substances to inform new policies.
2. **Costs in current situation, compared to hypothetical national-level implementation (counterfactual scenario analysis).**

RESULTS: EFFICIENCY (4)

Q7. To what extent are the costs associated with the Regulation proportionate to the benefits achieved?

Costs from the Regulation to undertakings:

Table of total administrative costs for businesses between 2010-2017.

	Large enterprises	Medium enterprises	Small enterprises	All	
Economic (administrative) costs	**Survey score**	**Survey score**	**Survey score**	**Time costs (days)***	**Monetary costs***
Apply for licences (ODS Licensing System)	1.95	2.00	1.92	**6 607**	**1 885 881 €**
Licenses for import/export of products or equipment	1.93	2.03	2.09	**+222**	**+62 700 €**
Report annually (BDR)	2.15	2.00	2.09	**7 711**	**2 177 603 €**
Reporting on new substances	-	-	-	**+710**	**+200 383 €**
Register to the ODS system	-	-	-	**395**	**83 980 €**
Registration of exporters and repackagers of HCFC produced in the EU	-	-	-	**+14**	**+2 979 €**
Apply for quota (ODS Licensing System)	1.94	2.20	2.33	**+311**	**+87 685 €**
Register for essential laboratory and analytical uses (labODS registry)	1.86	1.89	2.00	**+2 392**	**+509 091 €**
Administrative costs from the Montreal Protocol				**11 375**	**3 372 309 €**
Incremental administrative costs from the Regulation				**+3 648**	**+862 840 €**
Total costs of the Montreal Protocol and the Regulation				**15 023**	**4 235 149 €**

Maximum share of costs from the Regulation

Legend

1 Zero costs
2 Minor costs
3 Medium costs
4 High costs
5 Very high costs

Note: Rows in blue identify *maximum* incremental costs of the Regulation from the costs of purely obligatory measures of the Montreal Protocol.

** Calculated based on unit costs (previous slide), multiplied by numbers of licences applied for, reports submitted, registrations, quotas applied for.*

RESULTS: EFFICIENCY (5)

Q7. To what extent are the costs associated with the Regulation proportionate to the benefits achieved?

Costs from the Regulation to undertakings:

Table of substantive compliance costs for businesses between 2010-2017.

	Large enterprises	Medium enterprises	Small enterprises
Economic substantive compliance costs	**Survey score**	**Survey score**	**Survey score**
Control leakage and emission when using the ozone-depleting substances	2.58	2.69	2.40
Follow technical requirements during reclamation and destruction of ozone-depleting substances	2.73	3.25	2.40
Undergo national inspections	2.24	2.08	1.57
Stop using HCFC for refrigeration etc. (phase-out)	3.60	3.00	N/A*

Note: Rows in blue identify *maximum* incremental costs of the Regulation from the costs of purely obligatory measures of the Montreal Protocol.

** No respondent in this category.*

Legend

1 Zero costs
2 Minor costs
3 Medium costs
4 High costs
5 Very high costs

RESULTS: EFFICIENCY (6)

Q7. To what extent are the costs associated with the Regulation proportionate to the benefits achieved?

Costs from the Regulation to competent authorities of the Member States:

Table of administrative costs for competent authorities of the Member States between 2010-2017.

Administrative costs	Survey score	Time costs (days)
Granting production authorisations; Art 10(7)	1.36	0
Reporting to the European Commission; Art 26	2.23	917

Note: This table presents costs stemming from the Montreal Protocol only, no incremental costs are included here.

Table of implementation and enforcement costs for competent authorities of the Member States between 2010-2017.

Implementation and enforcement costs	Survey score
Checking imports and exports of controlled substances by customs	2.85
Conducting inspections or checks; Art 28	3.23
Promoting the recovery, recycling, reclamation and destruction of controlled substances; Art 22(5)	2.59
Determining minimum qualification requirements for personnel in charge of the recovery, recycling, reclamation and destruction of controlled substances; Art 22(5)	2.76

Note: Rows in blue identify *maximum* incremental costs of the Regulation from the costs of purely obligatory measures of the Montreal Protocol.

Legend

1 Zero costs
2 Minor costs
3 Medium costs
4 High costs
5 Very high costs

RESULTS: EFFICIENCY (7)

Q7. To what extent are the costs associated with the Regulation proportionate to the benefits achieved?

Counterfactual scenario analysis:

- Hypothetical situation: Member States implement the Montreal Protocol at national level, build and maintain information systems.
  - Licensing
  - Quota
  - Reporting
  - Registration
- Overall: 28 'new' systems managed nationally.
- Given the internal market, implementing such national systems seems extremely difficult, if at all possible
- Costs to undertakings vastly superior, particularly when trading across national borders.
- Costs to Member States also higher: need to bear costs currently assumed by EU.

RESULTS: EFFICIENCY (8)

Q7. To what extent are the costs associated with the Regulation proportionate to the benefits achieved?

Health and environmental benefits from the Regulation:

- Human and environmental health benefits from reduced ozone depletion:
  - Lower impact on humans, flora and fauna affected by UV radiation, including agricultural crops.
  - Without the Montreal Protocol, estimated 2 million skin cancers by 2030 globally.[1]
  - $1.8 trillion in health costs and loss of lives avoided by 2060 globally.[2]
- *"Without the Montreal Protocol, the ODS emissions could have reached 15–18 Gt CO2eq per year in 2010, about half the CO2 emissions that year (Velders et al. 2007). This is about 11–13 times larger than their current level."* [3]

[1] UNEP (2015), citing van Dijk, A., et al., (2013) *Skin Cancer Risks Avoided by the Montreal Protocol-Worldwide Modeling Integrating Coupled Climate-Chemistry Models with a Risk Model for UV*. Photochemistry and Photobiology, 89: 234-246.

[2] UNEP (2015), citing Markandya, A. and N. Dale, (2012) *The Montreal Protocol and the Green Economy. Assessing the contributions and co-benefits of a Multilateral Environmental Agreement*, United Nations Environment Programme, Nairobi.

[3] UNEP (2011) *HFCs: A Critical Link in Protecting Climate and the Ozone Layer*, page 18.

RESULTS: EFFICIENCY (9)

Q7. To what extent are the costs associated with the Regulation proportionate to the benefits achieved?

Economic benefits from the Regulation:

- Uneven spread of economic benefits:
  - Benefit to producers and distributors gaining from the development of alternatives, cost to users.
  - Early phase-outs have incremental economic benefits for EU companies forced to 'move first' in the development and use of alternatives to ODS.
- Regulation forces monitoring of better leakage and emission control, fostering higher industrial efficiency (avoided loss of substances).

RESULTS: EFFICIENCY (10)

Q8. To what extent have the measures been efficient? Are there any unnecessarily complicated or burdensome aspects and areas of excessive costs?

- Stakeholders generally agreed that costs incurred are necessary and counterbalanced by significant benefits.
- Costs related to the Regulation not causing unnecessary burden.
- Businesses identify relatively small inefficiencies.
- Perceived burdensome measures counterbalanced by better monitoring and enforcement.
- Dealing with left-over uses of ODS and low-hanging fruits have been picked.
- Some administrative costs to authorities and undertakings are very high compared to their added value. E.g. Information requirements on laboratories and researchers using very small ODS volumes.

RESULTS: EFFICIENCY (11)

Q9. What are the reasons and magnitude of any identified inefficiencies? What could be the expected cost savings if these inefficiencies were absent?

- Sources of inefficiencies: business/organisational practices, technical issues with EU information systems and inefficiencies from administrative requirements.
- Expected savings: Small changes to administrative measures likely to lead to small efficiency improvements/reduced hassle.

CONCLUSIONS: EFFICIENCY

Conclusions:

- Large health and environmental benefits achieved over 3 decades which must be safeguarded.
- EU implementation choices contribute to better monitoring and enforcement, and lower emissions.
- EU-level legislation much more efficient than hypothetical national-level action.
- Number of stakeholders affected is much reduced compared to the beginning (1990s).
- Previous Regulations addressed low-hanging fruit, now becoming more costly to phase out (halons).
- Economic benefits unevenly spread: some companies benefit while others bear higher cost.
- Regulation presents some inefficiencies and small potential improvements; overall not burdensome to a high extent. Control of a few areas (e.g. laboratories) less efficient due to low impact.

Questions for your written feedback are in the summary paper.

EU ADDED VALUE

Evaluation questions:

Q12. What is the additional value resulting from the Regulation compared to what could reasonably have been achieved by Member States at national level?

Q13. What would be the most likely consequences of withdrawing the Regulation?

Methodology used:

- Arguments and conclusions mainly based on stakeholder and public consultations.

RESULTS: EU ADDED VALUE (1)

Q12. What is the additional value resulting from the Regulation compared to what could reasonably have been achieved by Member States at national level?

- EU wide monitoring and implementation, including IT systems, widely seen as more efficient than 28 national systems.
- Better compliance and higher ambition level enabled by coordinated approach.
- Level playing field for industry.
- Due to internal market, implementation at MS level appears not possible (e.g. strict border control needed).
- Achieved ambition is higher than likely would have been achieved as a sum of national measures.

RESULTS: EU ADDED VALUE (2)

Q13. What would be the most likely consequences of withdrawing the Regulation?

- Mainly the reverse of the benefits identified under Q12: loss of efficiency from EU-level legislation and systems.
- In addition: loss of valuable experience, expertise, institutions and practices.
- Endangering the progress made and the achievements of the past

CONCLUSIONS: EU ADDED VALUE

Conclusions:

- Strong arguments in favour of a common, harmonized EU approach instead of an approach at Member State level.
- Withdrawing the Regulation would pose a challenge to the functioning of the internal market and might also lead to complications and inefficiencies due to differences in national systems between Member States.
- It would also threaten compliance with international obligations and the progress made in environmental terms.

QUESTIONS?

FEEDBACK DISCUSSION

FEEDBACK DISCUSSIONS: EFFECTIVENESS, EFFICIENCY AND EU ADDED VALUE OF THE REGULATION

Questions for discussion:

- Do you think the Regulation has been effective in achieving its objectives?
- Do you think that the health, environmental and economic benefits of the Regulation are worth the costs?
- Do you think that legislation on ODS at EU level adds value, i.e. it is more effective and efficient than national-level implementation?

What written feedback did you provide?

- According to Art 22(5); Member States shall take steps to promote the recovery, recycling, reclamation and destruction of ODS. Can you give examples of such actions taken since 2010?
- Are you aware of any relevant issues of implementing the Regulation in the Member States, e.g. as regards enforcement, penalties, inspections, qualification requirements or else?
- Would you say that the data on costs presented in the tables (collected based on input during interviews and survey) are representative? If not, please specify.

PRESENTATION OF THE DRAFT STUDY FINDINGS

Coherence and Relevance of the Regulation

COHERENCE

Evaluation questions:

- Q10. To what extent is the Regulation coherent with related interventions both at EU and international level?
- Q11. To what extent is the Regulation's structure and content coherent?

Methodology used:

- Mapping of linked EU and international legislation.
- Analysis of input from stakeholder consultations (Survey, Questionnaire and OPC).
- Targeted consultation of stakeholders and experts to substantiate identified issues.

RESULTS: COHERENCE (1)

Identified linked EU legislation

Waste management:

- Framework Directive 2008/98/EC on waste (WFD)
- Directive 2012/19/EU on waste of electrical and electronic equipment (WEEE)
- Regulation (EU) No 1257/2013 on ship recycling
- Regulation (EC) No 1013/2006 on shipments of waste (WSR)

Chemicals:

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP)
- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (PIC)

Pesticide/biocide products:

- Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market
- Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products

Customs:

- Regulation (EU) No 952/2013 laying down the Union Customs Code (UCC)
- Regulation (EEC) No 2658/87 on the tariff and statistical nomenclature and on the Common Customs Tariff

F-gas:

- Regulation (EU) No 517/2014 on fluorinated greenhouse gases (F-gas regulation)

Industrial Emissions:

- Directive 2010/75/EU on industrial emissions (IED)

RESULTS: COHERENCE (2)

Identified linked international legislation

Maritime:

- International Convention for the Prevention of Pollution from Ships (MARPOL) 1973

Aviation:

- Convention on International Civil Aviation (Chicago Convention) 1944 and connected standards

Shipment of hazardous waste:

- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal 1989

Chemicals:

- Globally harmonized system, of classification and labelling of chemicals (GHS) (Seventh revised edition 2017)
- Rotterdam convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade 1998

RESULTS: COHERENCE (3)

Q10. To what extent is the Regulation coherent with related interventions both at EU and international level?

Overall results consultation:

- Majority of consulted stakeholders has not indicated that there are issues of coherence between the Regulation and EU or international legislation.
- Identified issues are of a more detailed nature and concern aligning the Regulation with relevant legislation to ensure its most efficient and effective functioning.

RESULTS: COHERENCE (4)

Customs:

- Definitions and procedures that are not fully aligned.
  - Concepts and definitions used in the Regulation (for example, “import” or “export”) are not used in customs legislation.
  - Existing customs procedures are not always compatible with the provisions of the Regulation.
- Lack of descriptive role for customs authorities.
  - The current wording of provisions in Chapter IV the Regulation (on trade) does not explicitly establish a clear role for Member State customs authorities.
  - This might affect the harmonised application of Regulation provisions related to customs and/or the prioritisation of such provisions by customs.

List of products and equipment (Art. 21) needs to reflect CN-codes.

- Regular changes in the CN-codes on the international level could render the list of products and equipment which might contain or rely on controlled substances (Art. 21) outdated. Alignment needs to be safeguarded to allow customs to identify relevant products and equipment.

RESULTS: COHERENCE (5)

Aviation sector:

- ICAO standards do not fully reflect the EU´s phase out timeline.
  - ICAO efforts to align its standards with halon phase-out came after (and were incentivised by) the EU´s adoption of a halon phase-out schedule.
  - ICAO standards have only be amended regarding a limited number of halon applications phased-out by the EU.
  - For applications covered by both the ICAO standards and the EU phase-out schedule, different cut-off dates exist.
  - Result: different requirements will exist for newly produced aircraft registered in the EU and aircraft which are not.
- EASA certification specifications might not fully contribute to the EU halon phase-out timeline.
  - In 2012, The EASA amended aircraft certification specifications removing recommendations regarding the use of halon-based systems. However, no prohibition on the use of halon was adopted.

RESULTS: COHERENCE (6)

Chemicals:

- Potential synergies with REACH.
  - Regulation and REACH should continue to share information. Proposal stakeholder:
    - Integrating information on ODP of substances under REACH.
  - Additional proposal stakeholder:
    - Consider whether there is value in regulating very short lived substances (VSLS) via REACH, as it already restricts some of these substances.

RESULTS: COHERENCE (7)

Waste management:

- Definitions concerning waste management in the Regulation and relevant waste legislation are not aligned (e.g. Waste Framework Directive 2008/98/EC).

Definition	Regulation (EC) No 1005/2009	Waste Framework Directive 2008/98/EC
Recycling	The reuse of a recovered controlled substance following a basic cleaning process.	Any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations."
Recovery	The collection and the storage of controlled substances from products and equipment or containers during maintenance or servicing or before disposal.	Any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy. Annex II (red. of the Directive) sets out a non-exhaustive list of recovery operations.
Reclamation	The reprocessing of a recovered controlled substance in order to meet the equivalent performance of a virgin substance, taking into account its intended use	No definition provided.
Destruction	Approved technologies listed in Annex VII of the Regulation	No definition provided. The WFD has a definition for disposal which partly includes destruction of a waste.

- General indication from Member State authorities: more explicit provisions on the recovery and destruction of used controlled substances (Art. 22) needed.

RESULTS: COHERENCE (8)

Q11. To what extent is the Regulation's structure and content coherent?

Overall results of the consultation:

- Majority of consulted stakeholders has not indicated that there are issues of internal coherence regarding the Regulation
- Most identified issues related to the improvement of the structure and readability of the Regulation.

RESULTS: COHERENCE (9)

Relevance of Articles and references:

- Several outdated our obsolete provisions identified.
- Several provisions identified which will "expire" on 31 December 2019.
- Deletion or amendment of outdated or obsolete provisions in the Regulation could contribute to structure and clarity.

Laboratory quota:

- Regulation (EU) No 537/2011 laid down the mechanism for allocation of quantities of controlled substances allowed for laboratory and analytical uses.
- "First generation" of companies (pre-2009) which applied for quota are limited by the quantities they used in the past (i.e. cannot apply for new quota).
- Companies that applied for quota after this date are practically not limited in their request for quota.

CONCLUSIONS: COHERENCE

Conclusions:

- Issues regarding coherence of the Regulation with relevant EU and international legislation are limited.
- Only a few issues in the field of customs, aviation, chemicals and waste have been identified as relevant.
- Issues regarding internal coherence of the Regulation are limited.
- There exists the possibility to improve structure and clarity of the regulation by the removal or amendment of outdated or obsolete provisions

RELEVANCE

Evaluation questions:

Q4. To what extent is the intervention still relevant? In particular, are the provisions permitting exemptions still relevant?

Q5. How well is the Regulation adapted to technological and scientific developments? In particular, to what extent alternatives to ozone-depleting substances became available?

Methodology used:

- Collecting evidence from reported and statistical data, in particular by EU
- Literature review
- Analysing results from consultations (stakeholders and public)
- Detailed in-depth information collected from stakeholder consultations (phone)

RESULTS: RELEVANCE (1)

Q4. To what extent is the intervention still relevant? In particular, are the provisions permitting exemptions still relevant?

Relevance of the Regulation for meeting the EU obligations under the Montreal Protocol

- Without the Regulation, existing international obligations would not be met going forward considering that ODS could be reintroduced without the Regulation.
- EU's contribution to protect ozone layer and concomitant environmental benefits without the Regulation could not be assured as it avoids reintroduction of such substances and contributes to identification of issues endangering recovery.
- Some ODS are still in use
- The Regulation also takes measures preventing illegal trade and in this way supports efforts in developing countries to phase-out ODS.
- Action from the EU therefore still needed.

RESULTS: RELEVANCE (2)

Q4. To what extent is the intervention still relevant? In particular, are the provisions permitting exemptions still relevant?

Relevance of provisions in the Regulation for exempted uses

- All stakeholders generally agree that alternatives for some exempted uses are available.
- However, there is current lack of alternatives in certain fields such as halons for some critical uses, and areas where alternatives will never be available, e.g. reference standards in essential laboratory and analytical use.

Source: Results of public consultation, survey to undertakings and survey to competent authorities

RESULTS: RELEVANCE (3)

Q4. To what extent is the intervention still relevant? In particular, are the provisions permitting exemptions still relevant?

Relevance of provisions in the Regulation for exempted uses

Process agent uses:

- Several sub-categories have technically and economically feasible alternatives already in use.
- Very few sub-categories are either lacking alternative or are currently under development.
- Few old installations still in place for specific uses that would require design of the plant and thus hinders alternatives due to technical and economic constraints.

Critical uses of halons:

- Several available options identified for certain types of applications, e.g. at airports, airfields, in land-based command and communication facilities and for military ground vehicles.
- Protection of unoccupied cargo compartments: Several options are deemed infeasible due to weight constraints, need for technical changes or acting as additional explosion enhancement.

RESULTS: RELEVANCE (4)

Q4. To what extent is the intervention still relevant? In particular, are the provisions permitting exemptions still relevant?

Relevance of provisions in the Regulation for exempted uses

Laboratory and analytical uses:

- Uses as common solvents and cleaning agents have largely been phased out by alternatives with similar polarity and solvent properties
- For essential laboratory and analytical uses (CTC, MB, 1,1,1-Trichloroethane), for some uses alternatives are available with exceptions of use as reference material and samples to be tested
- There are standards developed by ASTM International describing methods that do not use ODS anymore.

Feedstock uses:

- Alternatives are available for limited number of different processes
- Large share of the competent authorities was not aware of alternatives in general.
- Slow progress in substitution potentially due to technical difficulty to replace and/or expenses connected with replacements.

RESULTS: RELEVANCE (5)

Q4. To what extent is the intervention still relevant? In particular, are the provisions permitting exemptions still relevant?

Relevance of provisions in the Regulation for derogations

- Main substance derogations were made for HCFC-22 for various uses (refrigeration uses, manufacturing of photovoltaic cells, production processes.
- No derogation decisions have been made for HCFCs after 2014
- Rise of derogation applications is expected with approach of cut-off dates for critical uses of halons, in particular in aircraft.
- Key consultation results: Member States in majority agree that possibility to apply for derogations are still needed in their Member State.

RESULTS: RELEVANCE (6)

Q5. How well is the Regulation adapted to technological and scientific developments? In particular, to what extent alternatives to ozone-depleting substances became available?

- Undertakings and Member States agree that alternatives have become available because ODS are controlled by the Regulation and that there is indeed progress in finding alternatives because ODS are controlled.
- Under one third of all responding undertakings indicated that, due to the Regulation, actions were taken to reduce the amount of ODS involved in their activities.
- The Regulation with its phase-out schedule seems to take relevant technological and scientific development into account, not least by combining possibility of derogations with challenging phase-out dates.
- Progress in some areas of exempted uses is obvious, but generally, pace is slow given that these are the last, and therefore most difficult sectors to find alternatives, and that some (other) areas are left mostly unregulated.

CONCLUSIONS: RELEVANCE

Conclusions:

- Regulation remains highly relevant as EU is still bound to act as party to Montreal Protocol, needs to control remaining uses and needs to ascertain that results achieved in previous decades are maintained.
- There is also need to maintain exemptions in light of stable demand where no alternatives exist or alternatives are not technically or economically feasible.
- Similarly, derogations may continue to be needed for some sectors, in particular halon for use in aircraft in future.

QUESTIONS?

FEEDBACK DISCUSSION

FEEDBACK DISCUSSIONS: COHERENCE AND RELEVANCE OF THE REGULATION

Questions for discussion:

- Are all relevant issues concerning external and internal coherence covered by the presented findings?
- What evidence exists for supporting the conclusion that alternatives are available for several uses but are still lacking (and will continue to be lacking) in certain fields?
- Is there anything to be added to/remarked about the presented issues of coherence?

What written feedback did you provide?

- Based on your experience, could you provide further specific evidence whether alternatives development was pushed by the Regulation or was the effect of the Regulation or whether it would have occurred without the Regulation as well?

THANK YOU!

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