European Union Network for the Implementation and Enforcement of Environmental Law

WEEE Directive Implementation and Enforcement

Brominated Flame Retardants in WEEE plastic and Annex VI of the WEEE Directive

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Introduction to IMPEL

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) is an international non-profit association of the environmental authorities of the EU Member States, acceding and candidate countries of the European Union and EEA countries. The association is registered in Belgium and its legal seat is in Brussels, Belgium.

IMPEL was set up in 1992 as an informal Network of European regulators and authorities concerned with the implementation and enforcement of environmental law. The Network's objective is to create the necessary impetus in the European Community to make progress on ensuring a more effective application of environmental legislation. The core of the IMPEL activities concerns awareness raising, capacity building and exchange of information and experiences on implementation, enforcement and international enforcement collaboration as well as promoting and supporting the practicability and enforceability of European environmental legislation.

During the previous years IMPEL has developed into a considerable, widely known organisation, being mentioned in a number of EU legislative and policy documents, e.g. the 7th Environment Action Programme and the Recommendation on Minimum Criteria for Environmental Inspections.

The expertise and experience of the participants within IMPEL make the network uniquely qualified to work on both technical and regulatory aspects of EU environmental legislation.

Information on the IMPEL Network is also available through its website at: www.impel.eu

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Executive Summary

Waste electrical and electronic equipment (WEEE) is one of the fastest growing waste streams in the EU, with some 11.6 Mt (15,6 kg/inh) generated in the EU 2014 (and 41.8 Mt worldwide), and expected to grow to more than 50Mt in 2018 worldwide (The global E-waste Monitor UNU-IAS, 2015).

WEEE contains a complex mixture of materials and components, which are also partly hazardous. If not properly managed WEEE can cause major environmental and health problems. Also, the production of electronics requires the use of scarce and expensive resources. The improvement of collection, treatment and recycling and the avoidance of illegal export (to countries with poor treatment facilities) of electronics at the end of their life is essential to contribute to a circular economy.

For 2017 we have chosen to focus the project on brominated flame retardants in WEEE plastic and on Annex VI of the WEEE Directive (minimum requirements for shipments).

In 2017 two questionnaires were sent to IMPEL participants, one on Annex VI and one on BFR's. In June 2017 a workshop was held in the Netherlands to discuss the outcome of the questionnaires and to present and discuss best practises.

Conclusions Annex VI

1. In most countries Annex VI of the WEEE Directive is implemented in national legislation as set out in Annex VI. Deviation is minor. There are however some interpretation differences, e.g. in some countries Annex VI is only applicable if the shipment is first considered as waste.

2. Just two countries have more extensive legal test requirements. Annex VI doesn't contain detailed test requirements. The lack of test requirements for both exporters as inspectors makes the enforcement of Annex VI more difficult.
3. Although the test requirements are different among countries, they are similar in the way the requirements are set up (visual inspection, electrical safety and functionality testing).
4. Prosecution of the exporters within Europe is quite difficult in itself, but becomes almost impossible because of the fact that they are mainly non European citizens.

Recommendations Annex VI

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1. To develop guidelines on test requirements which can be used by exporters and inspectors and which are uniform within Europe. These test requirements should be binding for all MS.
2. To develop an uniform document for test recording, labelling and declaration. This also includes the requirement (see 3, step 1 Testing of Annex VI) the evaluation of the presence of hazardous substances.
3. To develop an inspection guidance note which includes the test requirements.
4. To develop a guidance document for prosecutors (together with ENPE).

European Commission

1. Instead of test requirements it will be a easier to forbid the export of UEEE which is older than a certain age and/or which are known for containing hazardous substances (like CRT screens or other hazardous substances e.g. mentioned in Annex VII of the WEEE Directive or POP substances) and/or having a high energy consumption.
2. To reduce illegal exports, recycling within Europe should be stimulated, e.g. by adding in the Ecodesign Directives the obligation to use recycled material in new products.
3. In general it is advisable to use EU regulations instead of directives (particularly to give the WEEE Directive the status of a regulation). Regulations guarantee more uniformity among Member States than directives.

Conclusions BFR's

1. All countries that gave a response have implemented the provisions concerning BFRs in WEEE plastic according to WEEE directive to their national law. But there are considerable classification differences for BFR-containing WEEE plastic e.g. not listed, Annex IV, Annex III, hazardous or not hazardous waste.
2. The competent authorities have only minor experience on how to inspect BFRs in WEEE plastic (priority for detecting illegal shipments is rather low).
3. Data about production, treatment and export of WEEE plastic containing BFR is poor.
4. There is no common understanding on the threshold of BFRs and the way to detect BFR's in WEEE plastic.
5. There is no common understanding on the responsibility for removing and treating BFR-containing WEEE plastic.

6. Lack of awareness regarding the provisions concerning BFRs in WEEE plastic at companies dealing with WEEE plastic.

Recommendations BFR's

IMPEL

1. Developing a first draft inspection plan on BFR in WEEE plastic including:
   - a common understanding on classification of BFR containing WEEE plastic and the threshold for BFRs;
   - list of detections methods for BFRs;
   - responsible persons for removing/treating BFRs plastics etc.
2. Awareness raising by providing a leaflet for companies dealing with WEEE.

European Commission

1. New waste code for plastic containing BFRs.
2. Obligation for waste treatment companies to report the removal and the treatment of WEEE plastic containing BRFs.

Inhoud

1. Introduction

1.2 Background

Waste of electrical and electronic equipment (WEEE) is one of the fastest growing waste streams in the EU, with some 11.6 Mt (15,6 kg/inh) generated in the EU 2014 (and 41.8 Mt worldwide), and expected to grow to more than 50Mt in 2018 worldwide (The global E-waste Monitor UNU-IAS, 2015).

The new WEEE Directive (2012/19/EU of the European Parlement and the Council of 4 July 2012 on waste electrical and electronic eipment) introduces a collection target of 45% of electronic equipment sold that will apply from 2016 and, as a second step from 2019, a target of 65% of equipment sold, or 85% of WEEE generated. The new collection targets agreed will ensure that around 10 million tons, or roughly 20kg per capita, will be separately collected from 2019 onwards. Article 11 (in combination with with annex V) sets the recycling targets for the different product categories.

WEEE contains a complex mixture of materials and components, which are also partly hazardous. Not properly managed WEEE can cause major environmental and health problems. Also, the production of electronics requires the use of scarce and expensive resources.

The improvement of collection, treatment and recycling and avoiding illegal export (to countries with poor treatment facilities) of electronics at the end of their life is essential to contribute to a circular economy.

For the year 2017 is chosen to focus this project on brominated flame retardants in WEEE plastic and on Annex VI of the WEEE Directive (minimum requirements for shipments).

1.3 Aims

This project has two main aims/parts:

1. Improving the enforcement of illegal shipments of WEEE to countries with poor treatment facilities (African and Asian countries) by creating a guideline for a more uniform interpretation and enforcement of Annex VI of the WEEE Directive.

   Annex VI of the WEEE Directive gives Member States tools to fight illegal export of waste more effectively. Annex VI requires exporters to test and provide documents on the nature of their shipments when the shipments run the risk of being waste. Although Annex VI gives more tools, there are still elements which Member States can interpret (e.g. when is testing done properly, classification) and enforce differently. Different interpretation and enforcement will cause effects like port hopping and discussions on return shipments.

2. To prevent next generation of hazardous wastes by using waste plastics contaminated with PBDEs and PBBs for new plastic products (see requirements of the POP-Regulation and ROHS).

A desk study is necessary on the implementation of the WEEE Directive in national legislation concerning treatment of waste plastic containing brominated flame retardants (BFR). Furthermore improving the monitoring of waste plastics of WEEE containing BFR, stimulate enforcement actions in this field by exchanging information, working methods, case studies. The main aim is to prevent next generation of hazardous wastes by using waste plastics contaminated with PBDEs and PBBs for new plastic products (see requirements of the POP-Regulation and ROHS.

1.4 Reading Guide

In 2017 two questionnaires have been send out to the participants, one on Annex VI and one on BFR's. In June 2017 a workshop was held in the Netherlands to discuss the outcome of the questionnaires and to present and discuss best practises. Chapter two contains the outcome of the questionnaire, the workshop and conclusions and recommendations on Annex VI. Chapter three contains the same on BFR.

2. Annex VI WEEE Directive

2.1 Introduction

In Annex VI of the WEEE Directive minimum requirements for shipments are laid down.

"*In order to distinguish between EEE and WEEE, where the holder of the object claims that he intends to ship or is shipping used EEE and not WEEE, Member States shall require the holder to have available the following to substantiate this claim:" eg testing, recording of the test, labelling, copy of invoice etc.*

A questionnaire on the implementation and enforcement of Annex VI of the WEEE Directive has been send out to the participants. 16 responses have been received of 14 Member States, one country 2 responses, one unknown. Not all the questions have been answered.

The purpose of this questionnaire is:

- to get an overview of how Annex VI of the WEEE Directive has been implemented and is enforced in Member States;
- to identify best practices;
- to identify opportunities to make implementation and enforcement more uniform among IMPEL members.

June 14th-16th 2017 a workshop was held in which the outcome of the questionnaire was discussed and more in depth presentation on certain issues out of the questionnaire were given.

2.2 Outcome of questionnaire and workshop

2.2.1 Legal requirements

The first part of the questionnaire was on the implementation of Annex VI of the WEEE Directive in national legislation.

1. 11 Countries have implemented Annex VI in national legislation exactly as set out in Annex VI. 4 countries deviate, but the deviation is minimal eg having less recording requirements.

2. 4 Countries have issued a brochure/leaflet to inform exporters about the rules of Annex VI, 11 don't. There are different views among countries regarding exporters awareness of the rules of Annex VI. Some views:

   "Some exporters obey the rules, but a part of the exporters does not know the rules and the obligations of Annex VI regarding export of used EEE or they don't care about them".

"Perhaps most exporters know the obligations but the outcome differs from export to export. Some have necessary documents, some have falsified documents and some do not have any documents".

"Yes, the obligations of Annex VI are well known in general, but the exporters avoid to apply for a well implemented testing evidence because it costs time and money; at the moment it is easier to make road- and porthopping".

3. To distinguish UEEE from WEEE the exported equipment should be tested. 6 countries have test requirements, and 10 haven't, one country is working on it. 3 out of 6 countries have legal requirements of which one country refers to the requirements as set out in Annex VI. UK and Czech Republic have more extensive legal test requirements. In Finland the test requirements are part of the brochure for exporters. Austria has criteria for mobile phones.

   "Criteria for mobile phones: - checking the function by use of a SIM-card - checking the function by use of an accumulator - checking the function of the speaker and the micro - checking the function of the touch - screen and the functionality of the display - checking function of the buttons and the joystick - check if the handy can be switched on and started - the mobile phone may not be broken to several parts Additionally the BMLFUW published a "Manual Export/Transboundary Shipment of Used Goods". 3x Aanhalingstekens

   The requirements of the five countries (having more extensive requirements) are not exactly the same, but similar in the way they are set up.

   All the requirements contains:
   - a visual inspection (e.g. damage, cracks, signs of overheating, plug, cord);
   - an electrical safety testing (eg earth leakage, insulation testing, touch current). Regarding the electrical testing some countries follow the same electrical safety rules as for new equipment;
   - a functionality test, does it works as it is supposed to do.

4. 11 countries have companies who can carry out these tests, 4 don't. Some countries refer to qualified mechatronic technicians and/or registered at the Chamber of Commerce. In the ports of Hamburg, Antwerp and Amsterdam there are companies who are able to test the UEEE before export.

5. 4 countries (11 don't) provide the exporter with an example the evidence of the evaluation and the declaration as specified in article 1 under b and c could be. In Czech Republic it is part of their legislation.

   "Exporters are obliged to follow form listed in ANNEX 12 of national decree nr. 352/2005 Coll. on electronic waste. This includes template for: o test certificate, o test protocol of the functionality of EEE which includes: ♣ EEE ID - title/name of EEE, serial number and year of production, producer - if available, EEE category, ♣ ID of authorized person and certificate ♣ Test results (visual, technical), equipment used for testing, conclusion regarding equipment functionality and

safety ♣ Date, signatures o list of transported EEE, o list of hazardous substances in transported EEE and o declaration made by a holder who arranges the transport that none of the EEE is waste o Declaration is simple: The undersigned declares that he is the holder of EEE listed in the attached list transported electrical equipment responsible for fulfilling the obligations pursuant to article… (§ 37r Act on Waste) and that EEE are not waste as defined by article...(§ 3 Act on Waste)".

Czech Republic also requires a list of hazardous substances in transported EEE. In practise it is impossible for exporters to know if UEEE contains hazardous substances and which ones. See in annex III of this report the document which is provided by the Netherlands. Inspringen?

2.2.2 On inspection and enforcement

The second part of the questionnaire was on inspection and enforcement on Annex VI.

1. The first question on inspection was to rank the priority for detecting illegal exports of WEEE in your country. The outcome:

LOW PRIORITY	MEDIUM LOW	MEDIUM	MEDIUM HIGH	HIGH	TOTAL
1 (6,25%)	5 (31,25%)	1 (6,25%)	6 (37,50%)	3 (18,75%)	16

2. The second question was to rank the intensity on enforcement. The outcome:

LOW INTENSITY	MEDIUM LOW	MEDIUM	MEDIUM HIGH	HIGH	TOTAL
1 (6,25%)	4 (25%)	6 (37,50%)	2 (12,50%)	3 (18,75%)	16

3. The third question was: Indicate if you would intervene in the following cases:

YES/NO	YES	NO	TOTAL
If the copy of the invoice is not available	11 (73,33%)	4 (26,67%)	15
If the test results are not available	15 (100%)	0 (0%)	15
If the declaration is not available	9 (60%)	6 (40%)	15
If the packaging fails	15 (100%)	0 (0%)	15

4. The fourth question was : "Must all elements of point 3 of Annex VI (name of item, identification number, year of production (if available), result of test and test type) be available?"

   11 Countries answered yes and 3 no. Mentioned elements which are not so important are year of production or id number.

5. During inspections 12 countries out of 15 will check the authenticity of the documents (test results/declaration). This can be done by comparing the loaded UEEE with the documents or by testing the UEEE during the inspection. To check the authenticity of the documents is quite difficult, because there are no uniform test requirements or uniform documents regarding the test recording and declaration.

6. 5 Out 16 countries will test during an inspection. And if so, just a small part of the total load. Just two countries will test the functionality, the rest only test if the equipments switch on. Testing by the inspectors during a road inspection is almost impossible (eg time consuming, no place to carry out the inspection). Another difficulty is the fact that not all countries have trained staff to carry out this kind of inspections. Scotland has trained staff. Some inspectors have had a training (of 5 days) to be able to test UEEE. There is a preference to test the UEEE during an inspection before the container is loaded. The disadvantage of this type of inspection is the fact that you're not sure if the UEEE will be exported. As long the export documents are not made up the exporter has still the possible to test the UEEE.

   In Belgium, the port of Antwerp, there is a test location. Lorries and containers for inspection are unloaded at the test location. If the UEEE is not tested the load is seen as waste. In some cases the exporters have the possibility to test it at the location. The price for testing can differ from 5 to 30 Euro per item, depending on the equipement.

7. Regarding the question : "Would you assess a transit shipment the same as an export shipment, or would you accept the opinion of the authority of the country of dispatch?", 8 country answered the shipment would be assessed the same as in our own country. 7 countries follow opinion of the country of transit.

8. On the question: "Would you agree as a country of export / dispatch to the return of a shipment from a transit country of the export does not meet the transit country's requirements, which are more strict (but not stricter than Annex VI) than those in your country?", 11 country answered yes and 4 no. The information needed for a return shipment is the same as for any return shipment. If the country of transit has carried out some testing also the findings are part of the information. 14 out of 15 countries will prosecute in case of a return shipment. This can be country of dispatch or country of transit (depending on what they agree on).

   In some countries this issue is less important (like Scotland) because they are no transit country. For Belgium, the port of Antwerp is one of the main transit country, a more uniform enforcement within Europe is very important. Poland is more an import country for UEEE instead of an export country.

9. In general prosecution of these kind of shipments is quite difficult. Most of the exporters don't live in Europe and are already back to their own country before the shipment takes place and the burden of proof is high. 7 out of 15 countries hold also other partners (other than exporters) in the chain (like shiping lines, transport companies or brokers) responsible. They are sometimes easier to prosecute than the exporter.

   The burden of proof is high, difficulties are: that there are no uniform test requirements and document regarding the declaration and test recording. Also for countries having a border with non EU countries (like Romania) the cases are much more difficult to solve and to prosecute. Furthermore also translation and interpretation differences are mentioned as a problem. For example in some countries a shipment of UEEE must first considered waste before the inspectors

ask and look for the test recording, the labelling and the declaration. If the UEEE looks quite good and the packaging doesn't fail the UEEE is not considered waste.

2.3 Conclusions and recommendations

2.3.1 Main Conclusions

1. In most countries Annex VI of the WEEE Directive is implemented in national legislation as set out in Annex VI. Deviation is minor. There are however some interpretation differences, eg the example that in some countries Annex VI is only applicable if the shipment is first considered as waste.

2. Just two countries have more extensive legal test requirements. Annex VI doesn't contain detailed test requirements. The lack of test requirements for both exporters as inspectors makes the enforcement of Annex VI more difficult.

3. Although the test requirements are different among countries, they are similar in the way the requirements are set up (visual inspection, electrical safety and functionality testing).

4. Prosecution of the exporters within Europe is quite difficult in itself, but becomes almost impossible because of the fact that they are mainly non European citizens.

2.3.2 Recommendations

<u>IMPEL</u>

1. To develop a guideline on test requirements which can be used by exporters and inspectors and which are uniform within Europe. These test requirements should be binding for all MS.

2. To develop an uniform document for test recording, labelling and declaration. This also includes the requirement (see 3, step 1 Testing of Annex VI) the evaluation of the presence of hazardous substances.

3. To develop a inspection guidance including the test requirements.

4. To develop a guidance document for prosecutors (together with ENPE).

<u>European Commission</u>

1. Instead of test requirements is will be a easier to forbid the export of UEEE which are older than a certain age and/or which are known for containing hazardous substances (like CRT screens or other hazardous substances e.g. mentioned in Annex VII of the WEEE Directive or POP substances) and/or having a high energy consumption.

2. To reduce the export, recycling within Europe should be stimulated, e.g. by adding in the Ecodesign Directives the obligation to use recycled material in new products.

3. In general it is advised to use within the EU regulations instead of directives (particularly to give the WEEE Directive the status of a regulation). Regulations guarantee more uniformity among Member States than directives.

3. Brominated Flame Retardants in WEEE plastic

3.1 Introduction

WEEE contains a whole range of hazardous substances such as heavy metals and POPs (BFRs) in significant quantities. The uncontrolled release of those substances during disposal and recycling may cause risks to human health and environmental problems.

In the mid-1990s, about 150.000 tons of BFRs were produced annually. By the end of the 1990s the produced amount had almost doubled.

In order to limit the impact of hazardous substances to next generations of WEEE, legislative measures were taken within EU. RoHS (2002/95/EC) defines threshold values and also stipulates the substitution for the use of some heavy metals and PBDEs and PBBs in new EEE produced for the EU market after July, 1st 2006.

A questionnaire on the implementation and enforcement of restrictions referring to waste plastic containing BFRs has been send out to the participants. 10 responses have been received of 14 Member States. Not all the questions have been answered.

The purpose of this questionnaire is:

- to get an overview of how the legal provisions concerning the removal and the treatment of plastic containing BFRs have been implemented and are enforced in Member States;
- to identify best practices;
- to identify opportunities to make implementation and enforcement more uniform among IMPEL members.

June 14th-16th 2017 a workshop was held in which the outcome of the questionnaire was discussed and more in depth presentation on certain issues out of the questionnaire were given.

3.2 Outcome Questionnaire and workshop

3.2.1 Legal requirements

The first part of the questionnaire was on the implementation of legal provisions laid down in the WSR, ROHS and WEEE in national legislation.

1. All 10 MS which gave a response have implemented the provision “plastic containing brominated flame retardants (BFRs) have to be removed from any separately collected WEEE“ according to WEEE directive to their national law.

2. 9 responses were given to the question "To which control regime do you subject plastic waste from WEEE which exceeds the limit values of ANNEX IV of the POP regulation (850/2004 as amended) in case of TFS?"
   - 8 Notification (unlisted or A3180)
   - 1 Green list (B3010, but subject to notification)

3. 7 responses to the question "If you apply the "Green-list procedure", how do you ensure that the requirements of the POP regulation will be fulfilled?"
   - Practically impossible to ensure the requirements of POP Regulation.
   - We do not know. We do not do tests.
   - Within the EU the recycling plant analyzes the samples.
   - No remarks from others.

4. 10 responses to the question "If the concentration of PBDE exceeds the limit values of ANNEX IV of the POP regulation (850/2004 as amended), do you classify such waste as hazardous waste?"
   - 7 yes
   - 3 no

4. Only 4 responses to the question "If no, do you refer to the chemical characteristics of the specific POP, triggering a hazardous property in the meaning of Reg. 1357/2014?"
   - 3 yes
   - 1 no

   - DecaBDE no chemical classification yet

   POP-PBDEs:
   - Tetrabromo diphenylether - no harmonised classification; H318 - 10% (H400, H410 - 25% in AT at present, 0.25% in FIN).
   - Pentabromo diphenylether: H373, - STOT RE 2 - 10 % (H400, H410 25% at present in AT, 0.25% in FIN).
   - Hexabromo diphenylether - not classified yet.
   - Heptabromo diphenyl ether - not classified yet.
   - Octa BDE is not POP regulated substance, it is regulated by REACH – 0.3 % for HP 10.

6. 10 responses to the question "Do you have a legal provision which determines the person who is responsible for the treatment?"
   - 6 yes
   - 4 no

   - YES: nothing is specifically provided for the designation of a person responsible for the separation of bromine-containing plastics.
   - YES/NO: directly follow article 7 of POP regulation. Responsible for treatment is producer or holder of the waste.
   - YES: Waste Act 646/2011: Section 28: waste holder Section 46: producer responsibility
   - Do not know (others).

7. 10 responses to the question “Do you have an obligation to report about destroying or irreversible transforming of that kind of waste?”
   - 2 yes
   - 8 no

   - NO: Regional law, every company has to inform the government about each waste stream. However, there is no specific reporting obligation for the destruction of bromine-containing plastics.
   - NO: no direct reporting requirement however operators respond through generic waste data reporting.

8. NO response to the question “Do you have a leaflet for exporters in which you inform them about the legal provisions concerning BFRs in WEEE?”

9. 10 responses to the question “To detect BFRs in plastic of WEEE, the plastic have to be analyzed. Are there mandatory requirements how the analysis should be performed (e.g. reference to CENELC CLC/TS 50625-3-1s > plastics fractions declared as without BFR: 2000 ppm of Bromine)?”
   - 2 yes
   - 8 no

   - Separation brominated - non-brominated plastics is carried out by flotation separation. Hereby the heavy plastics are separated and discharged as bromine-containing.
   - Conformance with British and European standards. Guidance on this given in the following document: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/427077/LIT10121.pdf
   - Recently a reference to CENELC CLC/TS 50625-3-1s has been introduced. Plastic fractions which show total bromine contents (XRF measurement) below 2000 mg/kg are classified as POP-free according to this standard. The limit 2000 mg Br/kg will require adjustment in the near future if a POP-limit for DecaBDE is set in Annex IV for the waste management sector.
   - The waste operator makes all this analyzes.

10. 10 responses to the question “Do you have the impression that the obligations concerning the separation of plastic containing BFRs and the mandatory treatment of that kind of waste are well known by the persons involved?”
    - 2 Yes, most persons involved know about and fulfil the obligations concerning plastic containing BFRs.
    - 2 Yes, most persons involved know about the obligations concerning plastic containing BFRs but mandatory treatment will be done incorrect or insufficient .
    - 5 No, only few the persons involved know about and/or act according to the obligations concerning plastic containing BFRs.
    - 1 Other

FI: The issue was studied in 2015: Not all the plastics containing BFRs are separated from the equipment but the **separation is done based on cost-effectiveness.** So part of the plastics containing BFRs ends to the crushing process. Plastics parts containing BFRs are exported to Asia and Europe among other plastics. Small appliances, like mobile phones, are usually delivered as whole to smelters. The producer corporations were asked (in 2015) how the companies separate the plastics containing BFRs. **Only two answers were obtained**: It was described that the equipment are treated on risk based approach based on the producers, production year (before 2006) etc. XRF-analyzers are used to detect bromine, the limit value being 0,1 w-%.

3.2.2 On inspection and enforcement

The second part of the questionnaire was on inspection and enforcement concerning BFRs in plastics.

1. The first question on inspection and enforcement was to rank the priority for detecting illegal exports of of waste plastic (from WEEE) containing BFRs.

LOW PRIORITY	MEDIUM LOW	MEDIUM	MEDIUM HIGH	HIGH	TOTAL
2 (20%)	6 (60%)	1 (10%)	1 (10%)	- (0%)	10

2. The second question on inspection and enforcement was to rank the intensity of enforcement on this subject in your country.

LOW PRIORITY	MEDIUM LOW	MEDIUM	MEDIUM HIGH	HIGH	TOTAL
2 (20%)	6 (60%)	1 (10%)	1 (10%)	- (0%)	10

3. The third question was “Do you have data about the amounts of waste plastic (from WEEE) containing BFRs?”.

YES/NO	YES	NO	TOTAL
are produced in your country?	3 (30%)	7 (70%)	10
are imported into your country?	2 (20%)	8 (80%)	10
are exported from your country?	1 (10%)	9 (90%)	10
are treated in your country?	0 (0%)	10 (100%)	10

4. Do you take samples of waste plastic (from WEEE) during inspection?
   - 1 yes
   - 9 no

   - AT: Samples were only take by trained experts in compliance with EN standards for sampling.
   - HR: Environmental protection inspectors are not trained and do not have the authority to take samples of any kind of waste.

5. Do you test waste plastic (from WEEE) during inspection?
   - 1 yes

- 9 no

➢ AT: Sometimes trained experts do spot checks of bromine content with XRF ("handheld")

3.2.3 Any other comments

1. Other activities (not covered in the above questions) in your country in relation to waste plastic containing BFRs

Austria: Material recycling of plastics with BFRs even if they are not POPs is not allowed.

Material recycling of plastics with BFRs is allowed according to § 16 (2) of the Austrian Waste Treatment Obligation ordinance only, if the flame retardant must be added to the new product due to technical requirements and if no restrictions/bans on the basis of the chemical legislation exist.

In Annex I of the EU POP regulation very stringent limits for POPs exist. A dilution of wastes in order to achieve these limits is not allowed.

Czech Republic: XRF Spectrometer in use. Screening tests won´t detect PBDEs itself (congeners; only Br).

Other field analyzers (Raman, FT-IR) – up to now no results or outputs how effectively to measure PBDE in plastic by these methods.

Similar problem with HBCDD (hexabromocyclododecane) in polystyrene (EPS, XPS) used as construction insulation (ca. 0,5-2,5 % HBCDD). Information campaign in regard to treatment of this POP waste (after it becomes waste) is now in place. This waste is not usually subject of export.

Other problem is represented by European legislation – different Regulations (POPS, REACH) and Directives (RoHS) or conventions (Stockholm) regulate POPs, BFRs. It is often difficult to orientate in the diversity of different legislation for formal and informal sector.

Germany: Waste-treatment-regulation (especially for waste plastic containing BFRs) in work (German environmental agency: UBA) - working group of the German states (LAGA): LAGA M 31 A/B (Draft): Guidance for the correct treatment of WEEE.

Finland: A survey of BFRs in WEEE and waste vehicles will be done this year. Focus on how the restrictions have been implemented.

Netherlands: Set up an enforcement plan on BFR in which NL set out how they could enforce. However there is no validated method to analyze the few specific BFR limit values of POP.

2. How can this project help you to implement and to enforce the obligations concerning the separation of plastic containing BFRs and the mandatory treatment of that kind of waste (more) effectively?

   Several comments were given:
   - Clear limit values for BFRs.
   - Introduction of specific entries for plastic waste exceeding the POP limits (WSR - Annex IVA + EU List of Waste + entry in Basel list A).
   - Clear specifications in regard to the separation of waste plastic containing BFRs.
   - Detection methods for BRF in plastics.
   - Standardized sampling.
   - Adequate level of inspections and a consistent level of enforcement.
   - Leaflet for exporters.
   - Better communication between Authorities.

3.3 Conclusion and recommendations

3.3.1 Main conclusions

1. All countries which gave a response have implemented the provisions concerning BFRs in WEEE plastic according to WEEE directive to their national law. But there are considerable classification differences for BFR-containing WEEE plastic e.g. not listed, Annex IV, Annex III, hazardous or not hazardous waste.

2. The competent authorities have only minor experience on how to inspect BFRs in WEEE plastic (priority for detecting illegal shipments is rather low).

3. Data about produced, treated or shipped amounts of BFR-containing WEEE plastic are poor.

4. No common understanding on the threshold of BFRs and the way to detect BFR's in WEEE plastic.

5. No common understanding on the responsibility for removing and treating BFR-containing WEEE plastic.

6. Lack of awareness regarding the provisions concerning BFRs in WEEE plastic at companies dealing with WEEE plastic.

3.3.2 Recommendations

<u>IMPEL</u>

1. Developing a first draft inspection plan on BFR in WEEE plastic including:
   - A common understanding on classification of BFR containing WEEE plastic and the threshold for BFRs.

- List of detections methods for BFRs.
- Responsible persons for removing/treating BFRs plastics etc.

2. Awareness raising by providing a leaflet for companies dealing with WEEE.

<u>European Commission</u>

1. New waste code for plastic containing BFRs.

2. Obligation for waste treatment companies to report the removal and treatment of WEEE plastic containg BRFs.

Annexes

Annex I Minimum requirements for shipments (Annex VI)

1. In order to distinguish between EEE and WEEE, where the holder of the object claims that he intends to ship or is shipping used EEE and not WEEE, Member States shall require the holder to have available the following to substantiate this claim:

   a) a copy of the invoice and contract relating to the sale and/or transfer of ownership of the EEE which states that the equipment is destined for direct re-use and that it is fully functional;

   b) evidence of evaluation or testing in the form of a copy of the records (certificate of testing, proof of functionality) on every item within the consignment and a protocol containing all record information according to point 3;

   c) a declaration made by the holder who arranges the transport of the EEE that none of the material or equipment within the consignment is waste as defined by Article 3(1) of Directive 2008/98/EC; and

   d) appropriate protection against damage during transportation, loading and unloading in particular through sufficient packaging and appropriate stacking of the load.

2. By way of derogation, point 1(a) and (b) and point 3 do not apply where it is documented by conclusive proof that the shipment is taking place in the framework of a business-to-business transfer agreement and that:

   a) the EEE is sent back to the producer or a third party acting on his behalf as defective for repair under warranty with the intention of re-use; or

   b) the used EEE for professional use is sent to the producer or a third party acting on his behalf or a third-party facility in countries to which Decision C(2001)107/Final of the OECD Council concerning the revision of Decision C(92)39/Final on control of transboundary movements of wastes destined for recovery operations applies, for refurbishment or repair under a valid contract with the intention of re-use; or

   c) the defective used EEE for professional use, such as medical devices or their parts, is sent to the producer or a third party acting on his behalf for root cause analysis under a valid contract, in cases where such an analysis can only be conducted by the producer or third parties acting on his behalf.

3. In order to demonstrate that the items being shipped constitute used EEE rather than WEEE, Member States shall require the following steps for testing and record keeping for used EEE to be carried out:

   Step 1: Testing

   a) Functionality shall be tested and the presence of hazardous substances shall be evaluated. The tests to be conducted depend on the kind of EEE. For most of the used EEE a functionality test of the key functions is sufficient.

b) Results of evaluation and testing shall be recorded.

Step 2: Record

a) The record shall be fixed securely but not permanently on either the EEE itself (if not packed) or on the packaging so it can be read without unpacking the equipment.

b) The record shall contain the following information:
- name of item (name of the equipment if listed in Annex II or Annex IV, as appropriate, and category set out in Annex I or Annex III, as appropriate);
- identification number of the item (type No) where applicable;
- year of production (if available);
- name and address of the company responsible for evidence of functionality;
- result of tests as described in step 1 (including date of the functionality test);
- kind of tests performed.

4. In addition to the documentation requested in points 1, 2 and 3, every load (e.g. shipping container, lorry) of used EEE shall be accompanied by:

a) A relevant transport document, e.g. CMR or waybill.

b) A declaration by the liable person on its responsibility.

5. In the absence of proof that an object is used EEE and not WEEE through the appropriate documentation required in points 1, 2, 3 and 4 and of appropriate protection against damage during transportation, loading and unloading in particular through sufficient packaging and appropriate stacking of the load, which are the obligations of the holder who arranges the transport, Member State authorities shall consider that an item is WEEE and presume that the load comprises an illegal shipment. In these circumstances the load will be dealt with in accordance with Articles 24 and 25 of Regulation (EC) No 1013/2006.

Annex II Example of declaration

Non-official example of a declaration as specified in article 1, under c in Annex 6 of the Directive 2012/19/EU as well a proof of evaluation and testing as specified in article 1, under b of Annex 6 of the Directive 2012/19/EU.

1. Person who arranges the transport (responsible for testing):	**2. Company who performed the test:**
Name:	Name:
Address:	Address:
Contact person:	Contact person:
Tel:	Tel:
E-mail:	E-mail:

3. Declaration

I, the person who conducted the evaluation and testing of all below listed equipment, declare that the results of evaluation and testing are complete and correct (Annex 6, Article 1 under b).

Name: Date: Signature:

I, the person who arranges the transport of the equipment listed below, hereby declare that prior to export the used equipment listed below was tested and is fully functional.(1) I confirm that this equipment is not defined as or considered to be waste in any of the countries involved in the transport and is destined for direct reuse(2) and not for recovery or disposal operations (Annex 6, Article 1 under c).

Name: Date: Signature:

4. Assigned number of the item of equipment (given by the holder)	**5. Name of the item of equipment (3)**	**6. Brand / producer**	**7. Identification number (type No.) if applicable**	**8. Year of production (if available)**	**8. Date of the functionality test**	**9. Kind of test performed (4)**	**10. Results of test (e.g. indication of full functionality or indication of defective parts and defect functions)(5)**

(1) Equipment is “fully functional” if it has been tested and demonstrated to be capable of performing the key functions that it was designed to perform.

(2) The using again of fully functional equipment that is not waste for the same purpose for which it was conceived without the necessity of repair or refurbishment.

(3) List the equipment for which the information is the same and that is intended to be moved together, and identify the names of the equipment, such as PC, refrigerator, printer, TV, etc.

(4) For example: laundry machine has been tested on main functions like program start, drain/pump program, spinning program. Television has been tested on main functions like image, volume, switching on/of, switching channels

(5) Attach details if necessary.

Annex III Terms of Reference

TOR Reference No.:	Author(s): Marina de Gier / Walter Pirstinger
Version: 1	Date: 20 October 2016
TERMS OF REFERENCE FOR WORK UNDER THE AUSPICES OF IMPEL	

1. Work type and title

1.1 Identify which Expert Team this needs to go to for initial consideration	
Industry	☐
Waste and TFS	☑
Water and land	☐
Nature protection	☐
Cross-c utting – tools and approaches -	☐
1.2 Type of work you need funding for	
Exchange visits	☐
Peer reviews (e.g. IRI)	☐
Conference	☑
Development of tools/guidance	☑
Comparison studies	☑
Assessing legislation (checklist)	☐
Other (please describe):	☑
Sharing best practises and giving feed back to the Commission regarding implementation and enforcement difficulties	

1.3 Full name of work (enough to fully describe what the work area is)

Improving the implementation and enforcement of the WEEE-Directive. The focus of this project will be on:

- Annex VI of the WEEE Directive, developing an uniform enforcement strategy.
- To share knowledge on how to deal with the hazardous substances (BFRs) in WEEE in relation to recycling with a focus on the role and possibilities for enforcement authorities.
- Classification of E-Waste, making an overview how WEEE is classified and developing an uniform guideline on classification.
- To identify how inspections (can) play a role in improving the reported figures regarding number of producers and importers, EEE put on the market and collection and recycling targets.

1.4 Abbreviated name of work or project

WEEE implementation and enforcement

2. Outline business case (why this piece of work?)

2.1 Name the legislative driver(s) where they exist (name the Directive, Regulation, etc.)

European Waste Shipment Regulation (EC) No 1013/2006

- *The enforcement activities are based on the EC Regulation (EC) No 1013/2006 on the supervision and control of shipments of waste within, into and out of the European Community. This is directly applicable in all Member States of the EU. Article 50 requires Member States to enforce the regulation and to check shipments and to cooperate bilaterally or multilaterally with one another in order to facilitate the prevention and detection of illegal shipments. The "revised burden of proof" has been laid down.*

- *According to the Regulation (EU)660/2014 from 16 May 2014 amending WSR 1013/2006 member states shall cooperate bilaterally and multilaterally in one another to facilitate the prevention and detection of illegal shipments.*

Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

- *The available evidence indicates that measures on the collection, treatment, recycling and disposal of waste electrical and electronic equipment (WEEE) as set out in Directive 2002/96/EC of 27 January 2003 of the European Parliament and of the Council on waste electrical and electronic equipment (6) are necessary to reduce the waste management problems linked to the heavy metals concerned and the flame retardants concerned. In spite of those measures, however, significant parts of WEEE will continue to be found in the current disposal routes. Even if WEEE were collected separately and submitted to recycling processes, its content of mercury, cadmium, lead, chromium VI, PBB and PBDE would be likely to pose risks to health or the environment.*

DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS recast)

- *Restricted substances referred to in Article 4(1) and maximum concentration values tolerated by weight in homogeneous materials (ANNEX II)*

  Polybrominated biphenyls (PBB) (**0,1%**)

  Polybrominated diphenyl ethers (PBDE) (**0,1%**)

Remark: According to European Waste Shipment Regulation (EC) No 1013/2006 and Basel

Convention respectively wastes, substances and articles containing, consisting of or contaminated with polychlorinated biphenyl (PCB), polychlorinated terphenyl (PCT), polychlorinated naphthalene (PCN) **or polybrominated biphenyl (PBB)**, or any other polybrominated analogues of these compounds, at a **concentration level of 50 mg/kg or more** are classified as hazardous wastes (subject to the procedure of prior written notification and consent, export prohibition to NON-OECD countries).

DIRECTIVE 2012/19/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on waste electrical and electronic equipment (WEEE)

- *Annex VI: Minimum requirements for shipments*
- ***plastic containing brominated flame retardants have to be removed** from any separately collected WEEE*
- *These substances, mixtures and components shall be disposed of or recovered in compliance with Directive 2008/98/EC*

COMMISSION REGULATION (EU) No 1342/2014 of 17 December 2014 amending Regulation (EC) No 850/2004 of the European Parliament and of the Council on persistent organic pollutants as regards Annexes IV and V (POP)

- *Annex IV: **Hexabromobipheny – low pop limit:** **50 mg/kg**, **sum of tetrabromodiphenyl ether, pentabromodiphenyl ether, hexabromodiphenyl ether and heptabromodiphenyl ether – low POP limit: 1000 mg/kg***
  *Art 7 (2): waste consisting of, containing or contaminated by any substance listed in Annex IV **shall be disposed of or recovered, without undue delay** and in accordance*
- *with Annex V, part 1 in such a way as to ensure that **the persistent organic pollutant content is destroyed or irreversibly transformed** so that the remaining waste and releases do not exhibit the characteristics of persistent organic pollutants.*

Remark: Up to now ***decabromodiphenyl ether** is no POP yet, but is already mentioned on a candidate list for "new" POPs under the Stockholm Convention.*

CENELEC - CLC/TS 50625-3-1
COLLECTION, LOGISTICS & TREATMENT REQUIREMENTS FOR WEEE - PART 3-1: SPECIFICATION FOR DE-POLLUTION - GENERAL

For the plastics fractions the substances to be investigated and the limits are one of the following according to the treatments performed on plastics:

- *plastics fractions declared as without BFR: **2000 ppm of Bromine** (Annexes C and D);*
- *BFRs in plastic fractions without restricted BFRs: **1000 ppm of restricted BFRs** (Annexes C and D);*

It is assumed that plastics from WEEE containing less than 2000 ppm of Bromine do not contain POP-PBDEs. Nevertheless they may contain Deca-BDE, which is no POP yet.

COMMISSION DECISION of 18 December 2014 amending Decision 2000/532/EC on the list of waste

pursuant to Directive 2008/98/EC of the European Parliament and of the Council
Wastes containing polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF), DDT (1,1,1-trichloro-2,2- bis (4-chlorophenyl)ethane), chlordane, hexachlorocyclohexanes (including lindane), dieldrin, endrin, heptachlor, hexaclorobenzene, chlordecone, aldrine, pentachlorobenzene, mirex, toxaphene, **hexabromobiphenyl** and/or PCB exceeding the concentration limits indicated in Annex IV to Regulation (EC) No 850/2004 of the European Parliament and of the Council (1) shall be classified as hazardous.

Note: **There is no reference to the low POP limit value for PBDEs** (and some other newly listed POPs), except as regards hexabromobiphenyl, for the classification as hazardous waste. Member States shall specify limit values for classification as hazardous waste at national level. In case of PBDEs some EU Member States either refer to the low POP-limit values, others to the chemical characteristics of the specific POP, **triggering a hazardous property in the meaning of Regulation No. 1357/2014.**

The Basel Convention and in particular: The draft technical guidelines on transboundary movements of electrical and electronic waste and used electrical and electronic equipment, in particular regarding the distinction between waste and non-waste under the Basel Convention

2.2 Link to IMPEL MASP priority work areas	
1. Assist members to implement new legislation	☑
2. Build capacity in member organisations through the IMPEL Review Initiatives	☐
3. Work on 'problem areas' of implementation indentified by IMPEL and the European Commission	☑

2.3 Why is this work needed? (background, motivations, aims, etc.)

Background

1. Waste of electrical and electronic equipment (WEEE) is one of the fastest growing waste streams in the EU, with some 9 million tonnes generated in 2005, and expected to grow to more than 12 million tonnes by 2020.

2. WEEE contains a complex mixture of materials and components, which are also partly hazardous. Not properly managed WEEE can cause major environmental and health problems. Also, the production of electronics requires the use of scarce and expensive resources. Regarding hazardous substances in WEEE:
   - WEEE contains a whole range of hazardous substances such as heavy metals and POPs (BFRs) in significant quantities. The uncontrolled release of those substances during disposal and recycling may cause risks to human health and environmental problems.
   - In the mid-1990s, about 150.000 tons of BFRs were produced annually. By the end of the 1990s the produced amount had almost doubled.
   - In order to limit the impact of hazardous substances to next generations of WEEE, legislative measures were taken within EU. RoHS (2002/95/EC) defines threshold values

and also stipulates the substitution for the use of some heavy metals and PBDEs and PBBs in new EEE produced for the EU market after July, 1st 2006.

- Maximum tolerable mass fractions for PBDEs and PBBs in (waste) plastics are 0.1 wt% (PBB <50mg/kg).
- "Monitoring of WEEE plastics in regards to brominated flame retardants using handheld XRF" (Aldrian, Ledersteiger, Pomberger; Waste Management 36 (2015) 297-304)According to this study 3.000 pieces of black (TV) and 1.600 pieces of grey (PC) plastic waste were analysed with handheld XRF technique.The high percentage of pieces exceeding the legal limit values for PBDEs (15% for TV and 47% for PC waste plastics) emphasises the importance of constant monitoring of this waste stream to ensure compliance with legal provisions.The limit value for PBB (50 ppm) was never reached due the fact that these flame retardants were not used for years.
- Due to the extensive usage of BFRs in the recent decades the monitoring of waste plastics in WEEE or separated from WEEE (which are destined for recovery within EU/OECD and in NON-OECD countries) is obligatory.
- The main aim is to prevent next generation of hazardous wastes by using waste plastics contaminated with PBDEs and PBBs for new plastic products (see requirements of the POP-Regulation and ROHS).

3. The new Directive introduces a collection target of 45% of electronic equipment sold that will apply from 2016 and, as a second step from 2019, a target of 65% of equipment sold, or 85% of WEEE generated. The new collection targets agreed will ensure that around 10 million tons, or roughly 20kg per capita, will be separately collected from 2019 onwards. Article 11 (in combination with with annex V) sets the recycling targets for the different product categories.

4. The improvement of collection, treatment and recycling and avoiding illegal export (to countries with poor treatment facilities) of electronics at the end of their life is essential to contribute to a circular economy.

This project has three main aims/parts:

1) Improving the enforcement of illegal shipments of WEEE to countries with poor treatment facilities (African countries) by creating a guideline for a more uniform interpretation and enforcement of Annex VI of the WEEE Directive.
Annex VI of the WEEE Directive gives Member States tools to fight illegal export of waste more effectively. Annex VI requires exporters to test and provide documents on the nature of their shipments when the shipments run the risk of being waste. Although Annex VI gives more tools, there are still elements which Member States can interpret (e.g. when is testing done properly, classification) and enforce differently. Different interpretation and enforcement will cause effects like port hopping and discussions on return shipments.

2) To carry out a desk study on the implementation of the WEEE Directive in national legislation concerning treatment of waste plastic containing brominated flame retardants (BFR). Furthermore improving the monitoring of waste plastics of WEEE containing BFR, stimulate

enforcement actions in this field by exchanging information, working methods, case studies. The main aim is to prevent next generation of hazardous wastes by using waste plastics contaminated with PBDEs and PBBs for new plastic products (see requirements of the POP-Regulation and ROHS.

3) The third main aim is to improve the reporting of Member States regarding collection targets (and underlying figures like number of producers and importers - including freeriders -, equipment put on the market) and recycling targets by exploring how enforcement activities can benefit a more accurate reporting of these targets and a positive contribution to more and better collection and recycling.

Because the WEEE Directive is a Directive, the implementation in national regulation can differs among Member States. The Commission itself is already taking action to work on a more uniform way of reporting. In this part of the project we will share experience, best practices and the possibilities and impossibilities on how enforcement can benefit a more accurate reporting but also a positive contribution to more and better collection and recycling of WEEE. In this part of the project we will also discuss the classification problems of WEEE and work on a more uniform interpretation. Also knowledge will be shared on how to deal with the hazardous substances in WEEE.

2.4 Desired outcome of the work (what do you want to achieve? What will be better / done differently as a result of this project?)

1. To work towards an adequate level of inspections in all Member States and a consistent level of enforcement regarding Annex VI of the WEEE Directive;
2. To work towards an adequate level of inspections in all Member States and a consistent level of enforcement regarding hazardous substances (BFR)in WEEE ;
3. Better reporting on collection and recycling targets by Member States;
4. Providing feedback to the Commission on the difficulties regarding implementation and enforcement difficulties;
5. More uniform system of classification.

2.5 Does this project link to any previous or current IMPEL projects? (state which projects and how they are related)

No (indirect to NCP Days and Enforcement Actions and the WEEE project 4 years ago)

3. Structure of the proposed activity

3.1 Describe the activities of the proposal (what are you going to do and how?)

The scope of this project is quite broad. Especially under part 3 (aim 3) there are a lot of subjects to discuss. This project will take 2 or 3 years.
In 2017 the focus will be on part/aim 1 and 2 and a start will be made with part/aim 3.

Part 1 and 2.

1. Making an area on Basecamp (January 2017).
2. Project team meeting to prepare questionnaire for part 1 and part 2 (March 2017).
3. Send out a questionnaire on how MS interpret and enforce Annex VI and deal with BFR in waste plastic of WEEE containing BFR. In these questionnaire we will also focus on courtcases and success and failure criteria (March/April 2017).
4. Making two guidelines based on the input of Member States on Annex VI and BFR based on the answers of the questionnaires (July 2017).
5. Workshop in which we will discuss these guidelines and share best practises on some issues of part 1 and 2 (October 2017).
6. Final guidelines on Annex VI and BFR (November 2017).

Part 3 (will be worked out in a new ToR for 2018)
In 2018 we will continue with part 3 of the project. Part 1 and 2 are supposed to be ready.

3.2 Describe the products of the proposal (what are you going to produce in terms of output / outcome?)

Guideline Annex VI
Guideline/report on BFR in WEEE waste plastic

3.3 Describe the milestones of this proposal (how will you know if you are on track to complete the work on time?)

See under 3.1 with time schedule

3.4 Risks (what are the potential risks for this project and what actions will be put in place to mitigate these?)

As said part 3 is quite a broad subject in which a lot of issues can be discussed. To keep it manageable, we will not take up all the issues at the same time. We will start with part 3 in 2018.
Also a risk can be the different implementation within MS of this Directive.
The people involved in part 3 can be different than the people involved in part 1 and 2.

4. Organisation of the work

4.1 Lead (who will lead the work: name, organisation and country) – this must be confirmed prior to submission of the TOR to the General Assembly)

Co-lead By Austria and The Netherlands (Walter Pirstinger and Marina de Gier)

4.2 Project team (who will take part: name, organisation and country)

Austria: Walter Pirstinger

Belgium:	An van Steenbergen
Croatia:	Branimur Fuk
Czech Republic:	Martin Zemek
Estonia:	Rene Rajasalu
Finand:	Hannele Nikander
Germany:	Katherina Aiblinger-Madersbacher
Iceland:	Hólmfríður Þorsteinsdóttir
Latvia:	Inga Senavska
Malta:	Daniella Sammut
Netherlands:	Marina de Gier
Norway:	Beate Langset
Poland:	Gabriela Palian
Portugal:	Marta Ramos
Romania:	Stefan Koksis Ludovic
Slovenia:	Ema Starbek Gregoric
Spain:	Manuel Salgado
United Kingdom:	hris Garvie and Chris Grove

4.3 Other IMPEL participants (name, organisation and country)
4.4. Other non-IMPEL participants (name, organisation and country)

5. High level budget projection of the proposal. In case this is a multi-year project, identify future requirements as much as possible

	Year 1 (exact)	**Year 2**	**Year 3**	**Year 4**
How much money do you require from IMPEL?	17.990			
How much money is to be co-financed	1.000 (venue/lunch)			
Total budget				

6. Detailed event costs of the work for <u>year 1</u>

	Travel € (max €360 per return journey)	**Hotel € (max €90 per night)**	**Catering € (max €25 per day)**	**Total costs €**
<u>Event 1</u>	2.160 (6x360)	1.080 (6x2x90)		
Projectteam (6 persons)				
March				
tbd				
6				

2				
Event 2	9.000	4.500	1.250	
workshop				
Oktober				
tbd				
25				
2				
Event 3				
<Type of event>				
<Data of event>				
<Location>				
<No. of participants>				
<No. of days/nights>				
Event 4				
<Type of event>				
<Data of event>				
<Location>				
<No. of participants>				
<No. of days/nights>				
Total costs for all events				

7. Detailed other costs of the work for year 1

7.1 Are you using a consultant?	☐ Yes ☑ No
7.2 What are the total costs for the consultant?	
7.3 Who is paying for the consultant?	
7.4. What will the consultant do?	
7.5 Are there any additional costs?	☐ Yes ☐ No Namely:
7.6 What are the additional costs for?	
7.7 Who is paying for the	

	additional costs?	
7.8.	**Are you seeking other funding sources?**	☐ Yes ☑ No Namely:
7.9	**Do you need budget for communications around the project? If so, describe what type of activities and the related costs**	☐ Yes ☐ No Namely:

8. Communication and follow-up (checklist)

		What		By when
8.1	**Indicate which communication materials will be developed throughout the project and when** ***(all to be sent to the communications officer at the IMPEL secretariat)***	TOR˅* Interim report˅* Project report˅* Progress report(s) ˅ Press releases News items for the website˅* News items for the e-newsletter Project abstract˅* IMPEL at a Glance ˅ Other, (give details):	☑ ☑ ☑ ☑ ☐ ☑ ☑ ☐ ☐ ☐	
8.2	**Milestones / Scheduled meetings (for the website diary)**			
8.3	**Images for the IMPEL image bank**	☑ Yes ☐ No		
8.4	**Indicate which materials will be translated and into which languages**			
8.5	**Indicate if web-based tools will be developed and if hosting by IMPEL is required**			

8.6	**Identify which groups/institutions will be targeted and how**	European Commission and member Sates
8.7	**Identify parallel developments / events by other organisations, where the project can be promoted**	

*ˇ) Templates are available and should be used. *) Obligatory*

9. Remarks

Is there anything else you would like to add to the Terms of Reference that has not been covered above?
