

# Minutes of the AHWG meeting for the revision of the EU Green Public Procurement criteria for Imaging Equipment

16<sup>th</sup> and 17<sup>th</sup> October 2018, Seville, Joint Research Centre, Directorate B – Growth and Innovation

## Participants List

	Last name	First name	organisation
1	BERGRAHM	Madeleine	HP
2	CAMBRAS	Joan	Consorci de Serveis Universitaris de Catalunya
3	DEGIORGIS	Enrico	European Commission - DG Environment
4	EL MRABET	Noam	Interel
5	FURKEL	Maxime	Lexmark
6	HALATSCH	Andreas	German Environment Agency
7	MARTINEZ	Embatex Iberia	Embatex Iberia
8	MAYA ALTAMIRA	Larisa	Viegand Maagøe ApS (project team)
9	SAN NICOLO	Hanna	Epson
10	SANCHEZ	Antonio	Nubepriint
11	VAN DIJK	Vincent	ETIRA
12	WESTERMEYER	Marc	EFIM
13	WOOD	Jonathan	Tenvic (project team)
Through webex			
14	BLANCH	Josep	Hospital Clinic Barcelona
15	KITAHARA	Hideko	Japan Business Machine and Information System Industries Association ( JBmia ) <i>(partially)</i>
16	SITTERS	Eric	ICL Industrial Products
17	VESTERLUND	Susanna	Swedish National Agency for Public Procurement <i>(only day 1)</i>

The JRC project team was represented by Renata Kaps, Candela Vidal-Abarca Garrido and Miguel Gama Caldas. The meeting was chaired by Miguel Gama Caldas from the Unit B5. Enrico Degiorgis from DG Environment Sustainable Production and Consumption Unit also attended and presented.

### Opening and welcome and Political objectives of the EU GPP and process description

Chairman welcomed the participants and presented an introduction to JRC and its scope of work. DG Environment presented the background and the political context of Green Public Procurement with particular reference to the Circular Economy Action Plan.

A stakeholder asked about the core criteria, how these can be incorporated in a tender. DG ENV said GPP criteria go beyond legal requirements as it is a voluntary instrument. GPP has criteria with different levels of ambition (Comprehensive being more ambitious than Core) which can be incorporated in a tender according to the contracting authority's preferences. Technical Specifications are compulsory and will be an integral part of a tender and a contract subsequently.

A participant asked whether there is a rule about developing core and comprehensive criteria and their compliance rate. Whether they are developed in order to meet specific market compliance rates. DG ENV replied comprehensive criteria are more ambitious than the core ones, and thus can also be linked with higher costs, therefore it is expectable that market compliance rate for

Comprehensive level is lower than for Core level. Another participant added that comprehensive criteria, although more ambitious, can also be complied by manufacturers after a period of time. JRC reminded everyone about the deadline for providing written comment to the revised criteria proposal, which is the 16<sup>th</sup> of November and presented next steps.

A stakeholder asked whether the GPP criteria have been aligned with EU Ecolabel criteria on Imaging Equipment. JRC replied that, although generally EU GPP criteria at Comprehensive level is aligned with EU Ecolabel criteria, for this specific product group the EU Ecolabel has been discontinued and thus harmonisation was not sought.

A participant asked whether there has been consultation for the Preliminary Report (PR). JRC said there has not been previous consultation, but the PR has been uploaded in the website and the stakeholders can provide comments. JRC added that the focus for consultation is on the Technical Report (TR) and in particular on the specific criteria and related verification procedure.

A stakeholder asked whether this is the only physical meeting. JRC replied that if there is absolute need for another meeting, a webinar will be set-up, but no more physical meetings will take place. However, the intention is to continue with written consultation after a new report is revised, based on this first round of stakeholders comments.

Stakeholders asked for an attendance list and for the presentations to be uploaded. JRC confirmed that the presentations will be available on the website by the end of the week and that the participants list will be included in the minutes of the meeting.

### **Summary of the Preliminary Report (PR)**

JRC presented the summary of the main conclusions from each task of the revision project. JRC asked specific questions to the stakeholders about the PR.

### **TASK 1: SCOPE**

A stakeholder said consumables also include paper, but paper is not included in the proposed GPP criteria. Why? JRC replied that there is a specific set of criteria for paper under development by the European Commission (EC). JRC also added that in spite of the fact that the criteria is old, the EC does not duplicate criteria for same product group. The stakeholder agreed with JRC, however, she pointed out it is important to make a specific distinction between different consumables in the proposed criteria because sometimes consumables are discussed in the reports without specifying which type of consumables.

A participant asked about the basis to remove speed exemption. A stakeholder said that cartridges are part of WEEE but containers are not and that makes a difference on how they are handled at end-of-life. Another stakeholder agreed. A project member said all the consumables procured are often part of the same procurement process so it does not make sense to run a separate criteria development process just for consumables.

A stakeholder said the current Managed Printing Services (MPS) does not cover some services like automatic replenishment of contracts. Scope should include these. A project member said the scope for services is not meant to exclude these services so the wording will be revised to avoid misinterpretations.

A participant said scanners and LFP are not included in Blue Angel so they don't see much alignment with GPP.

Another participant added that clones need to be better looked at within the whole GPP criteria, starting with a separate definition in the scope.

## **TASK 2: MARKET ANALYSIS**

A stakeholder said that in spite of the fact that consumption of consumables is difficult to be estimated, they should be addressed more in the report. Another stakeholder said paper sales should be included, as they give an indication of the amount of printing and in such a way consumables shall be quantified.

Another participant said the projected sales for products are too optimistic, they think numbers are too high. A project team member said data on consumables will be included in the next version of the report. Other project member said for products it is difficult to forecast up to 2030 with precision. The project team welcomed more data sources mentioned to be provided from the stakeholders.

A stakeholder said cartridges are not only important because of Global Warming Potential (GWP) but also due to waste creation.

Another participant said paper has the largest environmental impacts and it is thus more important than cartridges. JRC clarified the consumables do not include paper since the focus is on Imaging Equipment (IE) and paper is specifically excluded from the scope. There is a specific criteria set for paper. The project team will make clear in the report that paper has the highest life cycle environmental impacts but it is not in the scope of this GPP criteria and why.

## **TASK 3: TECHNICAL PRODUCT DESCRIPTION**

A stakeholder said the report mentions the OEM's LCAs could be biased towards their respective interest and asked what the basis to write that was. A project member clarified all the LCAs have been assessed the same way and there is no special treatment for OEM's LCAs.

A stakeholder said they do not agree on including 10 years' LCAs in the assessment. OEMs could provide newer studies. Also, according to the scoring done in the PR, the stakeholder noted that the oldest LCA gets the highest score and asked what the rationale behind that was. Another stakeholder said old LCAs shouldn't be discarded just because they are old, their comprehensiveness, data quality and independency is also important. A project member clarified that the scoring was done using on a LCA evaluation matrix developed by the JRC where different parameters are assessed and scored. JRC added the LCAs independency is also an important factor.

Another participant said this discussion in the report should also consider clones' environmental impacts.

Another participant said they are surprised paper is so dominant in the LCCs. He asks where the data are coming from. A project member replied the data sources are market prices found on the internet. One participant did not agree with the estimations and will provide data to show evidence that the cartridges are the dominant, for consideration to the next version of the report. He will send the references and data.

## **Scope and criteria structure, definitions**

A stakeholder asked whether JRC does an assessment of the current GPP criteria and if that will be included in a later version of the report. DG ENV replied this is not done when reviewing a product group GPP criteria set. DG ENV evaluates GPP through the Member States representatives for GPP, which is limited. That is the only way to evaluate GPP. Another participant asked whether GPP Helpdesk has been used to collect input. DG ENV says GPP has very limited capacity to perform thorough evaluation assessments. So input from the Helpdesk should not be expected. Another stakeholder added it is important to get as much information as possible from past experiences. They said a lot of work was put on the Ecolabel, for example, delivering no outcomes. JRC added that JRC can try to gather additional information from the Member States on the application of GPP

criteria for IE, however the stakeholders' survey included in the PR intended to capture input from stakeholders about Ecolabel and GPP. The problem JRC sees with GPP is to get procurers to provide feedback, since they cover a wide spectrum of people scattered at different departments and levels at public institutions. Difficulties are mainly related to get them on board.

## **Criteria area 1: Imaging equipment**

### **1. CPC1 Preliminary assessment of existing fleet and procurement needs**

JRC presented a new criteria proposal and asked stakeholders whether they were aware of something similar carried out by public procurers and for their general views. A stakeholder thought this was a good way to evaluate. A participant said the age of IE is not the only important parameter but also the use intensity. Another participant said the technical reliability could be used. The retained, return and reuse for recycling should be extended to include the use of that equipment in different units (i.e. reassignment). A project member said it is difficult to perform these detailed usage assessments because it would add much burden for the procurers, since this is a core criterion. The participant agrees, but thinks most large contracts have this information available. He says the same tool used for the number of IE can also provide information on usage. A stakeholder asked when this was supposed to take place in the procurement process. JRC clarified this is an initial stage, before bidders provide proposals, e.g. in the form of consulting. A participant said that, based on real life data there is trend of replacing IE before needed. According to WEEE, this should be avoided. Another participant asked whether refurbishment is included. He proposed to specifically include it, not only as part of reuse. JRC added they will consult with the standardisation team in JRC concerning material efficiency to make sure terminology is right and harmonised in the criterion.

### **2. Energy efficiency (TS1, AC1)**

JRC said energy use is still a hotspot. JRC made clear harmonisation with other schemes was important for the review of these criteria so they will be referred along the presentation.

A stakeholder said in spite the EU agreement with Energy Star (ES) was terminated it is still important. However, in page 33 of report, verification refers to registration, which is wrong. Another stakeholder mentioned that self-declaration should be enough and said that reference should be made to Blue Angel in relation to TEC rather than ES because ES focuses much on laser technology. Another participant did not agree on the reference to ES since this is not an EU instrument. It was asked whether not to use Blue Angel? This should be considered. He also said the comprehensive criteria combined with award criteria were not realistic. He did not agree that the market will always catch up to the level of the more ambitious criteria (i.e. the comprehensive ones). He thought the market penetration of 50% was not achievable (for Ecodesign at least).

Another participant said the requirement of LCC in the criterion depended on the methodology behind. There should be a harmonised methodology indicated.

A project member responded that ES uptake rate is quite high and rapid because the updates are becoming smaller and smaller. A stakeholder replied that even if technology exists the costs are too high. He said the comprehensive criteria should not demand high costs to achieve high compliance rate. A project member said the components coming into the market were more or less the same, which did not cost much more additionally. JRC thanked for the comments and clarified the ES agreement expired and that the verification as self/declaration should be enough. JRC said the consideration to refer to Blue Angel instead is not totally closed. JRC added that within the Directive presented on the slide there are rules for the declaration of LCC so all bidders use the same methodology. Project team will have a further look how precise those indications are.

### **3. TS2 Duplex imaging capability**

A stakeholder said he did not disagree with the proposal itself. He challenged again the reference to ES. He said the contact between DG ENER and the US EPA is rather low. Why not consider other alternative schemes? Another stakeholder added that in Blue Angel they cannot use the latest ES version (v3.0) because of their timelines. So, they will use 2.0 plus some extra minor additions. But he thinks it is OK to refer to 3.0 in the EU GPP.

Another stakeholder said that regarding thermal marking technologies, they should be defined somewhere.

JRC said that because the EC did not have Ecodesign energy measures on IE, they need to refer to other voluntary schemes. DG ENV added that if stakeholders were aware if there are other certified schemes to refer to energy efficiency they were welcome to provide this input. At the meeting, they were not aware.

### **4. TS3 N-up printing**

JRC asked the stakeholders if they are aware of any paper management practice that could be added to the GPP criteria, which could be useful to include. A stakeholder did not agree this criterion should be added just because of safety net. They don't see the added value, so it shouldn't be included in the reviewed GPP criteria.

### **5. TS4 Capability to use recycled paper**

A stakeholder said self-declaration should be also accepted a proof of verification. JRC clarified this is already in the text (self-declaration).

### **6. TS5 Capability to use remanufactured cartridges**

JRC asked stakeholders for their opinion and for possible improvements about formulation of the criterion. A stakeholder asked about the numbers and where they are coming from, since he thinks they represent only 10% of the EU market. He suggested revising these. He thinks only 10-15% maximum for the whole EU. Another stakeholder thinks the 20% figure for reuse is wrong, he thinks it is too optimistic (in Spain only 5% is reused). It was mentioned that currently non-OEM new builds are making a higher and higher share of the market.

A participant said a very similar requirement in Blue Angel exists (section 3.1.1.3 Nr.4), and suggested harmonisation.

A stakeholder said that with WEEE, the figure should change in the near future and asked whether JRC has any figure on reuse and refill and how many times this is done? Another stakeholder said most of the times this is done only once. If demand is not there, the investment is worthless. A participant added there is a missing market incentive.

A stakeholder added job creation is also relevant. There are 4000 families of cartridges and 2000 components, making them complex to refurbish/refill/reuse. There is a huge waste of cartridges but these many part numbers represent a big barrier. 50 to 70 thousand more jobs could be created, done by an analysis done by ETIRA. The stakeholder said that Ecolabel for cartridges could make consumers aware of cartridges quality products. A participant said the Blue Angel has specific criteria set for cartridges which can be used. Another stakeholder added there is a need for an European scheme because Blue Angel is still very German. The participant remarked Blue Angel

scheme is used internationally and it would be weird to have a separate EU scheme for cartridges but not for printers.

#### **7. TS6 Reduced number of materials**

JRC asked if stakeholders are aware of any related best practices and general opinion about the criterion. A stakeholder pointed out that any additive prevents recycling not only those mentioned in the report. He proposed to review the criterion and provide an improved formulation. JRC clarified flame retardants are only an example but the criterion is not exclusive.

#### **8. Postconsumer recycled plastic (TS7, AC2)**

JRC asked stakeholders for ideas on how to make verification easier and less burdensome for procurers. A stakeholder said he is very happy with this requirement to move forward to circular economy. He didn't understand numbers: "98% of plastics have at least 5% recycled plastic according to EPEAT registrations"? A project member clarified this refers to at least 5% according to EPEAT requirement. The project member clarified that it is because of the exemptions listed in EPEAT.

The stakeholder asked whether this should then be core criterion rather than comprehensive. Another participant said the exemption in EPEAT should be also included in the GPP. The project member clarified that instead of using precise numbers as EPEAT, ranges are used in GPP. The stakeholders said this would be burdensome, 50% recycled content should be the maximum. JRC said that differently to EPEAT, this is an information requirement rather than minimum requirement. The stakeholder asked about the award criteria. What is behind the point scaling? JRC clarified. A participant asks about the market behaviour. Why 25%? Does that reflect the market? JRC says according to EPEAT only 1.4% of the US market has 25%, so it is low penetration with this percentage. The participant recommends going higher than 25% as target maybe in the form of an award criterion, maybe up to 50%.

#### **9. Reparability and recyclability (TS8, AC3)**

##### **SPARE PARTS**

A stakeholder asked whether it makes sense to have a difference of only 2 years for inkjet between core and comprehensive. Another stakeholder thought the list of spare parts needed to be further defined. A participant asked what is meant by 'High Performance' models. Another participant asked how the criterion would be applied if a model doesn't have all these components.

A project member answered that the difference in 2 years for inkjet is due to higher costs. Concerning the list of spare parts, it is difficult to include all spare parts in a list. It was asked for ideas to make these terms more harmonized. High performance definition is included in ES and could be used in the GPP document.

A stakeholder clarified that spare parts listed should only be those that would shorten IE lifetime. It was asked whether spare parts should be limited to 3-4 spare parts. Another stakeholder asked again what to do if a product has spare parts that aren't applicable. A project member answered that the requirements refers to parts which are present in the product. They also added that it is important to have a comprehensive list in order to make sure they are all relevant parts are covered. JRC asked stakeholders provide further suggestions on specific parts that they think are not relevant and why.

## **DESIGN FOR DISASSEMBLY AND REPAIR**

A participant asked what it means “accompanied by a repair manual”. Is that manual on paper or electronic one? JRC replied format is not specified. A stakeholder asked about the economic thresholds. Repair is not feasible sometimes since some spare parts are very expensive. Then it would be too costly to repair. The report misses repair thresholds. JRC clarified that is the intention of the award criteria. Linking spare parts and products prices and use that to establish this criterion would be very difficult due to the large variability of spare parts. The verification proposed tackles price information already. The availability of price list could be made a Technical Specification (TS) instead. A stakeholder said MPS contracts must have this information available so information shouldn’t be difficult to get. Another stakeholder clarified some assumptions are made concerning some critical parts, that they will last long. There is a lot of complexity on establishing these relationships. He thinks current proposals in GPP criteria make more sense. Another stakeholder said labour costs would have to be linked to local conditions since they are very different. JRC said this is already addressed through the current criteria since information is provided for the local context. A participant clarified even the list of spare parts prices is difficult to get for independent companies.

## **DESIGN FOR RECYCLING**

A stakeholder asked to consider ISO 1043 where more information is available that would be useful for verification of this criterion. A project member said it is needed to look what other initiatives use for verification. Another participant asked the basis for defining >25g instead of >100g (as for content of plastic recycled content). The project member responded that this is because of what weight set for labelling of plastic parts. This is the smallest part on which a number identifying material can be stamped. A proposal to consider having 100 g threshold was made.

### **10. Substance emissions (TS9)**

A stakeholder said for scanners add LFP there are no testing methodologies available, so what should be used for verification? They said this should only be applicable to new products placed on the market and also proposed to use existing declarations for devices of identical construction (BA appendix B-M). A participant proposed to use tests declarations only for comprehensive criteria. In Blue Angel it is verified for different printing capacities as well. JRC said they will have a closer look on devices of identical construction and using same test results from one to the other. They also will look at the issue of non-availability of testing methodologies for scanners, LFP and MFDs. A stakeholder explained that the testing was being done at a specific set-up, so a configuration change would change emissions profile. Another participant said that when remanufactured cartridges are used, this should be included in the test set-up and covered in the substance emissions criterion. In Blue Angel, the emissions profile has to be from the product with the highest emissions. Some manufacturers proposed to have this not as a core criterion but just as a comprehensive one.

### **11. Noise emissions (TS10)**

A stakeholder said the Blue Angel new requirements are not necessarily better since it includes different levels at different times, so the older criteria may be better. Another participant asked whether noise should be included if it is not related to environmental impacts. JRC said this is important because of the human impact. For GPP it makes more sense. A stakeholder said it is important to also consider working environment including indoor emissions.

## **12. Hazardous substances requirements (SC1, TS11, TS12)**

A participant asked whether this is based on the decision tree provided in Hazardous Task Force work. Why not using the same decision tree? JRC clarified the decision tree developed by the EU Ecolabel Chemical Task Force with the aim to determine the hazard profile of substances which do not have harmonised classification in ECHA. The participant asked the basis to ban other substances as it is in Blue Angel. JRC said that they did in the frame of the GPP criteria for computers project analysis on whether all flame retardants were hazardous. The participant said only a small fraction is hazardous. The wording in current criterion puts all flame retardants as hazardous. It should be corrected. A participant said REACH article on use of Substances of Very High Concern (SVHC) is a requirement for information but not to restrict substances. JRC said EU GPP goes beyond the legal requirements. The participant asked what happens when the SVHC list will be updated. JRC responded this the most up to date SVHC is done when bidding. Another participant said that GPP would be too restrictive since now the number of substances is growing (190). Probably nobody would comply. A project member said lists of exemptions from Blue Angel are also applicable to GPP and recommends to check those. A participant suggested to either remove TS11 or to make it comprehensive. A stakeholder said if GPP starts banning, then substitutions should also be assessed. A participant named TCO has developed a methodology for PCs to develop a white list on flame retardants (Green Screen methodology). JRC responded that GPP has to rely on existing lists such as ECHA. There are indeed tools to evaluate substitutions available (like the Green Screen), however their application in the context of the GPP would be difficult. Not all procurers have technical stuff available to verify such an assessment. A project member reminded everyone Blue Angel has about 1000 products certified so it shows a high level of compliance. A participant said it would be interesting to see if GPP/Ecolabel for PCs and monitors works and how. Another participant said for televisions and monitors there is an ecodesign information requirement using an ISO 1043. JRC should check it out.

## **13. TS13 Firmware update control**

A participant said this is a crucial criterion as all OEMs claimed firmware updates are more frequent and explained as necessary for innovation, which is not always the case. The participant said this creates users problems because IE suddenly does not work with non-OEM cartridges and prevents using remanufactured cartridges. Thus the criterion should be kept but the wording should be revised still since it is confusing.

One stakeholder asked the OEMs what the intention of the chip was. A stakeholder replied it is for different uses. One is for safety and another is for updates with the IE. It was mentioned that a requirement is also already available in the Voluntary Agreement (VA), and according to industry stakeholders, it works well. The requirement is annually audited by the Independent Inspector, where evidence needs to be provided by OEMs. Annual audit reports are shared with all stakeholders including EU Commission, Member States and Market Surveillance Authorities and are publicly available on EuroVAPrint's website.

A project member pointed out at the loophole in the VA with wording. He wondered why it is safety related to this chip. A stakeholder asked if other IT equipment have this kind of criteria and said safety is related to avoid virus when rolling back. A participant said the VA only covers OEMs so remanufacturers have not been involved. In terms of security, he said the environmental impacts are counterproductive. The project member said there have been instances where firmware has been rolled back so it is technically feasible and the criterion implies this should be feasible but it does not oblige the user to apply it. Another stakeholder pointed out that the VA is not working. A project member clarified that there is a big loophole in the VA so the VA should not be used as a reference.



#### **14. Warranty and services agreements (TS14, AC4)**

JRC asked stakeholders about best practices. A stakeholder asked about the award criterion and JRC clarified. Another stakeholder proposed to split into two criteria: one for warranty and one for services. Services are more local, while warranty is more hardware related. A participant asked whether this criterion exists already in other criteria. JRC clarified it does exist in current GPP and other product groups GPPs and initiatives.

One participant agreed with criterion but stated that the wording should be improved (for instance what is understood under malfunctioning should be explained). Problem with including a reference to non-OEM are the clones, which can create malfunction and then the OEMs are the ones to blame. A project member said it is important to have comprehensive criteria on non-OEM since the opposite effect can be observed that OEMs blame non-OEMs for malfunctioning.

A stakeholder said a clear difference on quality evaluation should be placed between new and used cartridges. Although they agree quality should be evaluated.

A participant said according to the provided market analysis there is only one manufacturer providing 2-years warranty which means the core criterion is too ambitious. JRC welcomes splitting into two parts, although it is important to remember these criteria cover only products not maintenance services. JRC also referred to a 2-years period used by other schemes, reminding the aim of the GPP which is to push the market further.

#### **15. Take-back system (AC5, CPC2)**

A stakeholder said today hardware is covered by WEEE, so if individual take back systems are recommended a wrong signal would be sent that WEEE does not work. They mentioned that could be a distinction made between requirements for large equipment and small equipment (large equipment should be taken back, but not small low-end equipment). Another stakeholder asked about the aim of third-party involvement? JRC replied they would be an alternative to OEMs. One stakeholder proposed to provide information on different constellations of take-back systems.

Another stakeholder repeated that WEEE already covers products so if proper enforcement is done the figures would be different. Several stakeholders raised the issue of WEEE enforcement. Some participants were of the opinion that although the fulfilment of EU WEEE Directive is a legal requirements the fairly new adoption of cartridges under WEEE is not known to the market and therefore could be added as in the form of an additional criteria.

JRC emphasized that the proposed award criterion to praise bidders who take full responsibility to make sure full collection and higher potential for reuse and recycling is achieved.

#### **16. Supply of paper and imaging equipment consumables (TS15, AC6, CPC3)**

A stakeholder questioned the validity of AC6, since it is biased towards non-OEMs. JRC clarified also OEMs reuse and remanufacture cartridges. It fulfils the goal of GPP. The stakeholder said this is not balanced in her point of view. Another stakeholder pointed out that OEMs have the advantage to remanufacture OEM cartridges exclusive for OEM printers. A participant said these criteria incentivize environmental improvement and it is even modest since it is an award criterion. Another participant mentioned the environmental benefits may not pay back for containers, only for cartridges, due to the transport burdens. JRC clarified the discussion of environmental benefits of remanufactured and refilled cartridges/containers would take place the day after.

## **Criteria Area 2: Imaging Equipment consumables**

### **1. Consumable page yield**

A stakeholder asked how different cartridges for the same model can be compared. Another stakeholder said there are international methods like ISO standards for the testing. A participant supported the award criterion, but wondered how this should be done in the best way. They will provide written documentation on this. It seems there is a lot of flexibility for which method to use. There are different ISO standards. Another participant asked what “n-capacity” means. JRC replied the idea was to give flexibility for which standard to be used. In relation to the formula, a project member asked a stakeholder the difference of page yield between ISO standards and the others. He needs to check with experts. They did an internal exercise where even same ISO standards gave different results.

The project member asked the remanufacturers if they have issues with ISO standards. A participant said they did not have any problem with using the standards. Another participant said they’ve had problems with ISO on the performance of toner, but when it comes to ink is very different. The ISO on toners are relatively good standards but the ink is a different story. A stakeholder said ISO standards are theoretical yields so MPS suppliers should measure yields throughout the contracts to confirm these yields. He said the manufacturers should report the actual yield of these cartridges. Another stakeholder asked to explain why in the award criterion max to min yield is to be compared. He said if they declare the highest yield the cartridges/containers will become very expensive and will be too expensive for the tender. The project member replied the comparison is between the same products. Because max and min yield are looked at for the same machine. The total costs of ownership will be lower for cartridges/consumables with high yields. JRC summarised saying this is a complex criterion and stakeholders are welcome to provide input. A participant added that a standard mentioned (i.e. E3379-2 (fourth standard)) is not suitable for remanufactured cartridges. This should be corrected.

### **2. Consumable material efficiency (TS17, AC8, AC9)**

A participant asked whether cartridges are really recycled. Else the criterion on materials is not useful. Another participant agreed, recycling of cartridges is not really done and said the amount of ink should be considered as well in the formula. A project member said the amount of ink is directly correlated to the yield so it is taken into account. A stakeholder said this criterion is cumbersome to do calculations; it would be difficult for procurers. He claimed that their company has a high percentage of recovered plastics. Some materials can be recycled. Another stakeholder asked what OEM does with their postconsumer recycled. A stakeholder said they use that for new cartridges, it is a closed loop. The project member said the formulas are manageable.

A stakeholder added this criterion is not technologically agnostic. The procurers are buying the whole solution, printer + cartridge. Another stakeholder asked DG ENV whether it is legally possible to make criteria only for one technology and asked whether with this formula wouldn’t be biased. The project member said this formula can compare containers with cartridges and the figures show that containers and drums tend to be more efficient and remarked that this criterion targets laser technologies because they have more problems with material efficiency. But he recognises there is a bias towards laser. DG ENV said these criteria are checked legally with respective EC colleagues. A stakeholder asked DG ENV whether this will be consulted with his colleagues about any legal implication in this regard. JRC said this has already been consulted and will be consulted further. JRC remarked that the intention of the criterion was not to promote laser technology and the criterion will be extended on ink. A stakeholder supports these criteria and asked how this criterion would relate to remanufacturers since they are already saving materials. The project member replied the reuse of materials was considered for the formula but it would turn very complex. However, it was

concluded this criterion should be fair. JRC clarified this aspect. The stakeholder pointed out that this is addressed by the other criterion about awarding use of remanufactured cartridges. JRC wrapped-up and asked the stakeholders to provide further input to improve these criteria.

### **3. Consumable hazardous substances (TS18)**

JRC asked for comments, best practices, and initiatives. A stakeholder said he doesn't understand this criterion. Existing EU legislation already addresses this (REACH and RoHs). JRC said these pieces of legislation establish minimum thresholds and GPP criteria intend to go beyond the minimum. The stakeholder said they provide maximum protection. JRC disagreed saying they provide minimum requirements and GPP pushes the market further than that. Generally, there was a disagreement about whether Blue Angel criterion on hazardous substances (with which the EU GPP could be aligned) is based on scientific evidence. JRC explained the process of developing hazardous criteria in ecolabels, which is scientifically sound.

### **4. Reusability and remanufacturability (TS19, AC10, AC11)**

A stakeholder asked to get clarified about TS19, specifically about the example mentioned on patents. JRC said this is an example as considered the number one barrier. The stakeholder said that there is a risk of IP rights infringement and this criterion should be reconsidered carefully. Another participant thought the wording needs to be revised and said that suggestions would be provided in written. Clarifications were needed e.g. on what is the meaning of unrestricted? This could be misinterpreted and taken too far. Another example was "easily" and "reasonable cost".

JRC welcomed specific proposals from the stakeholders' side.

A participant agreed fully with these criteria. He asked a clarification on how exactly the chip prevents the cartridge/container remanufacturing. Another participant thought AC10 is biased towards remanufacturing. A stakeholder emphasized the need to make the application of the chip more transparent. Information on this was missing. He said the cartridges should not be owned by the OEMs after the customer purchases them. Another stakeholder suggested these criteria should be more technology neutral. He referred to Blue Angel as a good example to look at. A project member said the problem was to interpret about the 'constructive measure' phrase in Blue Angel. This could be interpreted as a limit to innovation. The requirement needs to be more specific. JRC asked a stakeholder to clarify why AC10 is biased. The stakeholder replied that it is only directed to one part of the market. JRC replied OEMs can also conduct remanufacturing, and in fact some of them do, so they do not consider this criterion as biased. JRC wrapped-up emphasizing that written input from stakeholders is very welcome and useful to improve these criteria. A participant said an indication of the nature of the cartridge/container in the packaging could add value. JRC emphasized GPP deals with B2B relationships; therefore consumer understanding on the packaging is not as relevant as in the B2C case, like in ecolabel criteria, for example.

### **5. TS20 Consumable Quality**

A participant, concerned that this is only directed to remanufacturers and does not consider OEMs' role, promised to provide written comments. He believes that there is no standard for comparing quality OEMs vs non-OEMs (except yield). He thought this criterion was biased. A stakeholder thought that page yield was enough since quality needs to be linked to the output of the cartridge/container. The stakeholder also questioned the applicability of the criterion to only one segment. A project member clarified this is done in order to address some opinions that non-OEMs consumables have lower quality.

A possibility mentioned by another stakeholder would be to use ISO 9001 but that is process-related. He pointed out the lack of recognised quality standards for cartridges/containers. A participant questioned what is a 'recognised quality standard'. A stakeholder also asked about clones, where are they addressed in the criteria? Another stakeholder pointed out also at the lack of standards. How do Nordic Swan and Blue Angel handle this? He said ISO 9001 is not a product standard. A participant mentioned the tests of the Stiftung Warentest in Germany which is used for quality assessment by Blue Angel.

Another stakeholder said it is difficult to define quality. JRC said it is important to have a standard as reference. A participant pointed out that MPS can be used as reference because they have more stringent quality needs. Another participant said quality has to be defined related to the output of the cartridge, i.e. number of printouts, but such an assessment is not available yet. A project member said clones definitively have to be addressed but maybe in other specifications. He also pointed out at the challenge to use MPS-like information on new products. This information does not exist. Another project member said ISO 9001 is a process-standard not product-standard and that another aspect that influences cartridges environmental impacts is specifically the quality of the printouts. A participant said the information available for MPS should be available also by OEMs when selling new products. He asked a stakeholder what information they share with public procurers. They replied there are legal/data protection issues with doing this. Another stakeholder agreed. The participant said data collection is different to data protection. Data can be collected which could provide useful information about quality, and the consumer can decide what to do with the data. JRC said they agreed on linking quality with output (yield), and concerning collection of data this will be discussed in the services criteria area.

## **6. Consumable take-back system implementation (TS21)**

A stakeholder pointed out that most requirements are covered by WEEE. Criterion should be applied to OEMs and non-OEMs. A participant pointed out at the difference between theory and practice particularly concerning WEEE. E.g. clones declare they are WEEE compliant but not always they are. Self-declaration is not sufficient; it will create a big loophole. Another participant fully supported the criterion. A stakeholder pointed out at the significance of this criterion due to the low collection rate. Also, many of cartridges are lost, based on statistics 8% are lost. He questioned the 20% collection rate. A participant said this 20% may refer mainly to B2C products. What consumers do with cartridges is out of control of OEM. A stakeholder said his suggestion on indicating on packaging is also relevant for B2B. A project member asked OEMs how to tackle clones in this criterion. The stakeholder said they are conducting a study on clones which will be disclosed eventually. A participant questioned whether it is really relevant to indicate on packaging/product the nature of the cartridge/container. The participant said LCAs should be used then for evaluation at procurement. A stakeholder said it is very important for the procurers to know the nature of the cartridges/containers for taking a decision on what to do. A project member said using LCA as a procurement tool would be very resource intensive and conclusions would not even be credible without third-party verification. A discussion was held about whether to use this or not. JRC concluded the GPP criteria are not solely LCA based at the moment. LCA is used mainly to point out hotspots.

## **GENERAL COMMENTS ABOUT CONSUMABLES**

A participant said criteria are missing on indoor air quality. JRC said indoor air quality is addressed indirectly in hazardous substances content criteria in consumables but specific suggestions are welcome. Another participant said measuring emissions is quite expensive so it would be too costly. A project member said the problem is to test what equipment to which consumables, how to define

the proper configuration that reflect the use. A stakeholder said the testing of the configuration of consumables is the same as for equipment for indoor air quality (in the Blue Angel).

Another stakeholder pointed out at the lack of post-consumer recycled content criteria on cartridges/containers. Why not? The project member said it could be included as award criterion if considered relevant. Several stakeholders agreed. JRC said that, at the present time, it can be problematic to verify the recycled content of plastics, and that this is a recurrent problem in several different product groups.

### **Criteria Area 3: Criteria area 3: Printing services**

#### **1. Definition of printing services**

JRC asked for input about definition. A stakeholder said the length of quantity of printed pages should be modified; it can also be linked to the amount of cartridges used. JRC asked how then to be defined. A participant said they would find it strange to be charged by number of cartridges, not by number of printed pages. The stakeholder said many small procurers do not understand the concept of number of printed pages. In the USA SMEs are accepting fees based on servicing, i.e. amount of cartridges used. A participant said there should be split between 'Basic' Printing Services and Managed Printing Services. Penetration of MPS in SMEs is very low. Their needs should be covered by including other levels of service providers that are not MPS.

A stakeholder said this is a key area to have criteria on. Market acceptance of printing services is lower in public procurement than in private companies. They proposed to link definition to 'access' to printing services than to number of pages. JRC said they would gather more examples from public procurers' contracts, but also welcomes specific suggestions from stakeholders and contact persons to procurers to gather examples.

#### **2. Commitment to reuse and repair of imaging equipment (TS22)**

A stakeholder said monitoring tools aid on knowing the optimal point to replace equipment. A participant said it is not always good from an environmental point of view to keep old products (nor from a functional point of view). They agreed so a trade-off analysis between energy and resources exists. A project member pointed out that care should be taken not to retain highly inefficient products. They said establishing a representative trade-off is resource intensive. A participant said he doesn't see this as relevant as the contracts specify the printers have to be replaced every 4-5 years. A stakeholder said they see an imbalance about the use of equipment, some are over-used and some are under-used. Some should be replaced but about 10% of the equipment should be kept. Project team will further work on this criterion.

#### **3. Supply of imaging equipment (TS23)**

No comments.

#### **4. Supply of paper and imaging equipment consumables (TS24, AC12, CPC5)**

A stakeholder asked whether the GPP criteria on paper require recycled paper is 100% recycled or less than that. DG ENV and JRC said they would check and get back to the stakeholder. Another participant was not sure whether asking for remanufactured cartridge content is the right approach. What they did in their procurement was to credit/award for the number of prints done by remanufactured cartridges. Another participant wondered whether the criteria really fulfil their aim since it may be that the remanufactured cartridges are not the best alternative. The criteria imply

remanufactured cartridges are better for the environment. JRC said that from a circular economy point of view in general they are. The stakeholder then said this should be linked to output/yield/quality of printouts. JRC clarified that complying with TS24(b) links to output/quality. However, the criteria on consumable quality need to be taken care of. A participant pointed out at a problem with counters by OEMs in printers which the MPS providers do not have any control on this. Sometimes some products have up to 1000 counters. OEMs should provide third parties with an indication on which counter to use. He has problems to identify which type of cartridges the printers use. It is needed that OEMs provide a way for third-parties to know what type of cartridges is used in the printers.

#### **5. Provision of consumable use information (CPC6)**

A stakeholder asked whether it is relevant to ask information about B/W and colour printouts. A participant asked about yield, is it actual yield or theoretical yield? A project member said it is actual yield. JRC responded that the B/W and colour should indeed be distinguished. Another stakeholder mentioned "dead on arrival" consumable concept could be used. He proposed to add information about the system consumption of consumables. A participant supported that usage information is collected.

#### **6. Guaranteed provision of consumables and spare parts during contract (TS25)**

No comments

#### **7. Provision of environmental information during service contract (CPC7)**

Stakeholders noticed that in this criterion there is improvement potential. The comparison should show what has been supplied and what happened with it at the end of life. A participant proposed to include information about collection not only supplied by OEMs in printing services. He also proposed to provide total number of cartridges/sku and collection rate. Another participant proposed to add real life data as information to be provided, e.g. the rate of printers replaced and at which stage of their life. A stakeholder asked clarification what is meant by 'other end of life options'. Landfill and (incineration) should be avoided. End of life for consumables should be included as information as well. Also, a clarification what 'Recycling' would mean to be clear it is not misinterpreted by considering also incineration?

### **Horizontal Criteria (applicable to all criteria areas)**

#### **1. Tender environmental management activities (SC2)**

A participant said EMAS should have a preference over ISO 14001 in the criterion. JRC said the criterion does not ask for a certification thus a preference is not given. A stakeholder was sceptical about the verification since it may be very vague. JRC then asked whether they would support certification. What about burdens for SMEs? The stakeholder said she cannot talk for SMEs. Another participant supported their argument. A couple of stakeholders thought this would be very burdensome for SMEs. A project member added the elements of an EMS can be specified in the verification as proof for documentation following the ISO 14001/EMAS guidelines and avoiding certification.

## **2. Guaranteed provision of consumables and spare parts during contract (TS25)**

A participant said this criterion would have a huge cost if only supplied when consumables and spare parts are needed. It would be better to formulate criterion to assure forecast of supplies/spare parts in advance not as a reactive measure. JRC welcomed participant's suggestion.

## **3. TS26 User instructions for green performance management**

A stakeholder proposed to include dynamic information as well. Based on his experience service providers try to educate users thus it is important to track use over time and communicate with suppliers. Another stakeholder supported the face-to-face (FtF) approach since a printed guide may be too static. Also include manual accessible online at manufacturer's website rather than printed. Another participant supported the suggestion but would give more options than a FtF meeting but also webinars and other means.

Another participant proposed to add cost information (e.g. savings) about implementing green management. That would incentivize procurers. A stakeholder proposed to add differences on environmental aspects linked to B/W and colour printing.

## **Concluding remarks and next steps**

The Commission thanked the stakeholders for attending and for their willingness to share their views and experience. They reminded stakeholders that they had until **16<sup>th</sup> November** to provide written comments on the proposal through the BATIS system. It was also clarified that comments to the Preliminary report can also be provided, but directly by e-mail, as the Preliminary report is not published in HTML format in BATIS. A stakeholder asked about timeline and judged that it would be necessary to consider carrying out at least a webinar beside the written consultation since many issues were still open. DG ENV said the rationale for the proposal is to reduce time duration of the revision process. However, the Commission is open to consider a webinar if needed, but keeping in mind the timeline should stay as short as possible. A participant asked when the slides will be sent. Presentation and slides will be uploaded at JRC's website and this will be communicated to stakeholders.