Consultation document for

Rechargeable batteries and portable chargers

Version 5.0, 15 June 2018

Nordic Ecolabelling

Nordic Ecolabelling for Rechargeable batteries and Portable charters

Consultation document
030 – 5.0, 15 June 2018

1 Summary

The consultation has been conducted in all Nordic countries (besides Iceland) in the period from 22. January 2018 to 23. March 2018.

The biggest change after consultation has been to adjust the requirement for electrical testing so it aligns with test specification for endurance in cycles according to IEC 61951-2 (NiMH batteries/cells) and IEC 61960-3 (lithium batteries/cells). The requirement for endurance in cycles is now directly referring to IEC 61951-2, clause 7.5.1 (NiMH batteries) and IEC 61960-3, clause 7.6 (lithium batteries) and the specific requirements for battery types. The requirement to the number of cycles obtained when the test is completed has been adjusted from respectively minimum 400 and 500 fully charged cycles for NiMH and Li-ion/LiP batteries/cells to minimum 75% above the individual battery/cell type requirement level in IEC 61951-2 and IEC 61960-3. The requirement for example NiMH battery type AAA (<800 mAh) is minimum 350 cycles and Li-ion cell is minimum 700 cycles while Li-ion batteries is 500 cycles.

The requirement for pre-charged batteries has for safety reasons been adjusted to include only NiMH batteries and not Li-ion/LiP batteries/cells because of safety reasons. The definition of fully charged batteries has been clarified to equals minimum 85% electrical stored capacity (SOC).

Finally, it has been clarified that the requirement O3 that steel is only allowed to be used in the base panel that holds the USB and power ports, and only if the steel is coated or covered with e.g. plastic.

11 comments were received in the consultation of which 2 supports the proposal, 1 supports the proposal with comments, 5 only comments the proposal while 3 refrain from commenting the proposal.

Response to consultation comments
Nordic Ecolabelling has in section 4 given a response to all comments and described if the requirement has been adjusted. In section 6, you find a table showing all the changes that has been done in the criteria document after the consultation.

2 About the consultation

This document consist of feedback received during the public consultation for revised criteria for rechargeable batteries and portable chargers and Nordic Ecolabellings response to this feedback. The purpose of this document is to show how external feedback have affected the development of the criteria in complains with the ISO 14024 standard

Nordic Ecolabelling is grateful for all incoming inputs that helped us in the development of both ambiguous environmental as well as market based criteria for rechargeable batteries and portable chargers.

The consultation has been conducted in all Nordic countries (besides Iceland) in the period from 22. January 2018 to 23. March 2018. Telephone meetings have been held with key stakeholders (Nordic Swan Ecolabelling license holders for primary and rechargeable batteries and the European Portable Battery Association, EPBA) and input from the meetings is included as a basic knowledge of the revising the criteria.

The following areas of interest were identified in the consultation letter:

Major changes

- The product group definition - now it also includes portable chargers.
- New requirements for sourcing of "conflict-free" mineral and critical raw materials.
- Tightened requirements to battery capacity, durability of the battery and test-methods for rechargeable batteries.
- New requirements for battery and portable charger safety.
- New requirement for recyclable design of the portable charger

Most important issues
Nordic Ecolabelling would like to have comments on the complete criteria set, but would like to highlight the following points:

- New requirements for sourcing of "conflict-free" mineral and critical raw materials.
- Tightened requirements to battery capacity, durability of the battery and test-methods for rechargeable batteries.

3 Compilation of incoming comments and feedback

Table 1: Compilation of incoming comments. The columns show: A. Only comments, B. Supports the proposal, C. Supported is the proposal with comments, D. Refrain from commenting and E. Rejects the proposal with justification.

Country	A. Only comments	B. Supports the proposal.	C. Supports the proposal with comments.	D. Refrain from commenting.	E. Rejects the proposal with justification.	Total
Denmark	2			1		3
Sweden	2		1	2		5
Finland	1					1
Norway		2				2
Iceland						
Total	5	2	1	3		11

Table 2: Danish consultation comments

Consulting party	A. Just commenting.	B. Supports the proposal.	C. Supports the proposal with comments.	D. Refrain from commenting.	E. Rejects the proposal with justification.
Forbrugerombudsmanden				*	
The European Portable Battery Association (EPBA) – representing 8 battery manufactures/brands: Duracell, Energizer, Panasonic, GP Batteries, Renata Batteries, Sony, Varta and Sunlight (Toshiba)	*				
Hengdian Group DMEGC Co.	*				
Σ Danska svar:	2			1	

Table 3: Swedish consultation comments

Consulting party	A. Just commenting.	B. Supports the proposal.	C. Supports the proposal with comments.	D. Refrain from commenting.	E. Rejects the proposal with justification.
Kommerskollegium	*				
Perpetuum Energi & Miljö			*		
Bileko Car Parts AB				*	
GP batteries	*				
ICA Sverige				*	
Σ Svenska svar:					

Table 4: Finnish consultation comments

Consulting party	A. Just commenting.	B. Supports the proposal.	C. Supports the proposal with comments.	D. Refrain from commenting.	E. Rejects the proposal with justification.
Teknologiateollisuus ry	*				
Σ Finska svar:	1				

Table 5: Norweigen consultation comments

Consulting party	A. Just commenting.	B. Supports the proposal.	C. Supports the proposal with comments.	D. Refrain from commenting.	E. Rejects the proposal with justification.
Nille Trading AS		*			
Elfa Distrelec AS		*			
Σ Norska svar:		2			

4 Comments to the criteria in detail

The various comments from the consultation stakeholders have been inserted below and grouped in relation to the specific requirement. Nordic Ecolabelling has given a response to all comments and described if the requirement has been adjusted. In section 6, you find a table showing all the changes that has been done in the criteria document after the consultation.

4.1 General comments

Perpetuum Energi & Miljö
The Nordic Power Market is deregulated. Companies can choose what kind of power they buy. There is ecolabelled power to buy; specified green power. And there is the EU REDISS audit system to provide guarantees against double-selling of the green power. REDISS system with it's Guarantees of Origin insures that the green power is not sold twice. All Ecolabelling criteria should state, as a definitive must: - All the licensee's power contracts within the Nordic countries must be labelled Bra Miljöval El (Good Environmental Choice Electricity) - All the licensee's power contracts within the EU must either be ecolabelled (e.g. German Ökostrom or international EKOenergy www.ekoenergy.org/) or be specified green renewable power. No fossil fuels or nuclear power should be allowed in any Nordic Ecolabel licensee. Nordic Residual Mix is a very dirty power with 48 % fossil origins. Nota Bene: this means ALL contracts for electricity: to offices, warehouses, industries, plants, organisations, houses, trains, cars, all power contracts must be green).

Comments from Nordic Ecolabelling
Nordic Ecolabelling thanks you for your comments. Nordic Ecolabelling believes, at the present time, that premiums for the use of green power documented with guarantees of origin or other ecolabelling schemes should be used with great caution, because such a requirement don't automatically leads to a clear environmental impact. The schemes provide increased costs for users of electricity, without the revenue being directly linked to an increased renewable energy development.

Hengdian Group DMEGC Co.
After reading through the proposal generation 5 of criteria, in my personal view, it's much complete than the previous one.
The content is much more detailed for rechargeable batteries and portable chargers.

Comments from Nordic Ecolabelling
Nordic Ecolabelling thanks you for your comments and support.

Kommerskollegium
Sammanfattning
Kommerskollegium bedömer att rubricerat förslag kan behöva anmälas enligt förordningen (1994:2029) om tekniska regler. Vidare bedömer Kommerskollegium att förslaget inte behöver anmälas enligt förordningen (2009:1078) om tjänster på den inre marknaden. Kommerskollegiums uppdrag

Kommerskollegium ansvarar för frågor som rör utrikeshandel, EU:s inre marknad och handelspolitik. Kommerskollegiums uppdrag är att verka för frihandel. Det innebär att vi verkar för fri rörlighet på den inre marknaden och för liberaliseringar av handeln mellan EU och omvärlden samt globalt.

Anmälan av tekniska föreskrifter
Enligt förordningen (1994:2029) om tekniska regler ska förslag till teknisk regel anmälas till Kommerskollegium. Förordningen om tekniska regler genomför bestämmelser om anmälningsskyldighet i Europaparlamentets och rådets direktiv (EU) nr 1535/2015 om ett informationsförfarande beträffande tekniska föreskrifter och beträffande föreskrifter för informationssamhällets tjänster[1]. Tekniska regler som ska anmälas är till exempel krav på produktegenskaper, provning, tillverkningsmetoder och användningsvillkor[2].

Nordisk miljömärkning föreslår nya miljökriterier för uppladdningsbara batterier. Enligt Kollegiets bedömning innehåller förslaget sådana tekniska krav på varor som avses i 2 § punkten 2 i förordningen (1994:2029) om tekniska regler. Som exempel kan nämnas kravet på att plastdelar med en yta större än 200 mm2 i höljet måste märkas enligt ISO 11469 och att plasten inte får vara klorerad (O3).

Beträffande frågan huruvida förslaget är anmälningspliktigt enligt förordningen om tekniska regler kan nämnas att krav som är frivilliga som regel inte omfattas av anmälningsskyldigheten. Om de frivilliga kraven däremot har eller kan få en sådan bindande effekt att de blir en förutsättning för marknadstillträde, kan kraven i fråga behöva anmälas. Kommerskollegium har tidigare förklarat att Svanenmärkningen är en sorts statlig certifiering som kan innehålla faktiskt bindande tekniska regler. Kollegiet kan inte avgöra om de nu aktuella kriterierna har eller kan få en sådan bindande effekt att de behöver anmälas, utan vi hänvisar till Nordisk Miljömärkning Sverige AB för sådan bedömning. Kollegiet finns tillgängligt för samråd.

Anmälan av nya krav påtjänsteverksamhet Enligt tjänstedirektivet[3] är Sverige skyldigt att anmäla nya eller förändrade krav på tjänsteverksamhet till kommissionen. Yttrandet innehåller kriterier som uppladdningsbara batterier måste uppfylla för att få Svanenmärkas. I bilaga fem ställs krav på utövande av laboratorietjänster. Såvitt kollegiet förstår kan dessa krav komma att ställas på laboratorier som tillverkaren uppdrar för att testa batterierna. Sådan testning utgör en tjänst i tjänstedirektivets mening, varför direktivets anmälningsplikt kan bli aktuell. Enligt kollegiets uppfattning kan den typ av statlig[4] certifiering som Svanenmärkningen utgör anses vara ett krav i tjänstedirektivets mening. Definitionen av krav är bred och omfattar inte bara bindande lagstiftningsåtgärder[5].

[1] L 241/1 17.9.2015.
[2] 2 § 1 p. förordningen (1994:2029) om tekniska regler.
[3] Direktiv 2006/123/EG om tjänster på den inre marknaden
[4] Det är Nordiska miljömärkningsnämnden, ett organ som inrättades av de nordiska konsumentministrarna (men som nu styrs av Nordiska ministerrådet för miljö) som fastställer de produktspecifika kriterierna för Svanenmärkning. Nämnden fattar beslut efter förslag som de nationella miljömärkningsorganisationerna förbereder genom samarbete i den samnordiska föreningen Nordisk miljömärkning
[5] Begreppet ”krav” omfattar enligt tjänstedirektivets artikel 4.7 varje ”skyldighet,

Anmälningsplikten förutsätter emellertid att tjänsteleverantören måste uppfylla det aktuella kravet för att få tillträde till, eller utöva, tjänsteverksamheten. Därav följer att krav som är frivilliga i regel inte omfattas av anmälningsplikten. Även om de aktuella kriterierna till sin effekt skulle bli bindande på grund av Svanenmärkningens ställning på marknaden för uppladdningsbara batterier, behövs dock ingen anmälan enligt tjänstedirektivet eftersom de då bör anmälas enligt anmälningsdirektivet[6] för tekniska regler. I ärendets slutliga handläggning har ämnesråd Ulrika Båth Bertram deltagit.

Nordisk Miljømærknings kommentar
Nordisk Miljømærkning takker for remissvaret. Vi har noteret kommentarerne, men da de ikke specifikt handler om indholdet i forslaget til reviderede kriterier for Svanemærkede genopladelige batterier og power banks vælger Nordisk Miljømærkning ikke at svare i denne remissammenstilling.

4.2 What can carry the Nordic Swan Ecolabel?

No comments

4.3 Comments on specific criteria

4.3.1 Production and product description

O1 Description of the product

No comments

4.3.2 Resources

O2 Metal content of batteries

No comments

O3 Requirements applicable to plastic and metal in the casing of the battery charger and in the outer casing/container that encircles the batteries/cells in the portable charger

Teknologiateollisuus ry
Chargers' fire resistance is an important feature, therefore the use of some flame retardants in a plastic shell or metallic shell is a necessary protection for the battery.

The fire protection is an important property of the casing. Some flame retardants in plastics or a metallic casing is a necessary protection for the battery charger.

förbud, villkor eller begränsning som föreskrivs i medlemsstaternas lagar eller andra författningar eller som följer av rättspraxis, administrativt förfarande, regler från yrkesorganisationer eller kollektiva regler som yrkessammanslutningar eller andra organisationer har antagit som ett led i utövandet av sitt rättsliga oberoende".

We question the restriction of zinc, copper and cobalt in the casing of the battery charger. E.g. Co is not yet classified as a CLP CRM substance in every form of its exposure. Ni, Cr and Co is used in stainless steel, where they don't dissolve and therefore not cause any risk.

Comments from Nordic Ecolabelling
Nordic Ecolabelling thanks you for your comments. Nordic Ecolabelling agrees that fire protection is an important property of the casing in battery chargers and portable chargers. The flame-retardants HBCDD, TBBP-A and TCEP is already regulated by REACH candidate list. The requirement to the use of halogenated organic flame retardants and other flame retardants with specific risk phrases are also found in today's criteria (correspond to the requirement in other Nordic Ecolabelling product groups containing electronic products. It is also clear from the requirement that the requirement does not apply to the battery, the casing encircling the battery/cell itself, circuit/PCB's/charge ports.

The manufacture of heavy metals, zinc and nickel is associated with high-energy consumption and emissions of environmentally harmful substances. Cobalt and chromium is listed on the EU-list of critical raw materials[6] and therefore restricted in the requirement. Also, nickel and even cobalt can cause an allergic reaction in contact with skin. Nordic Ecolabelling agrees that the requirement is unclear when it comes to the use of steel. Steel is a metal substance that is an alloy of iron and other elements, such as manganese, chromium, nickel, carbon and so on. The contents of these metals varies but we are talking of small amounts. The requirement has therefore been clarified that steel is only allowed to be used in the base panel that holds the USB and power ports, and only if the steel is coated or covered with e.g. plastic (avoiding direct skin contact).

GP batteries
"All our powerbank using PC/ABS (Poly Carbonate/ Arylonitrile Butadiene Styrene) which can meet the V0 fire-retardant requirement."

Comments from Nordic Ecolabelling
Nordic Ecolabelling thanks you for your comments. Poly Carbonate/ Arylonitrile Butadiene Styrene is a blend of PC and ABS providing unique combination of the high processability of ABS with the excellent mechanical properties, impact and heat resistance of PC. Flame retardant additives are commonly used in polymers where they can either be reactive flame retardants which are chemically built inside the polymer or additive flame retardants that are not covalently bound to it. If flame retadants is added to the PC/ABS plastic these has to comply with the requirement.

O4 Battery charger, battery sizes

No comments

Corporate Social Responsibility

[6] http://ec.europa.eu/growth/sectors/raw-materials/specific-interest/critical_da (visited 17-04-2018)

O5 Sourcing of "conflict-free" minerals

EPBA

The proposed requirement for conflict minerals should not include Cobalt. To the best of our knowledge no recognised due diligence programme is in place to cover this substance. As a consequence, producers of portable batteries will not be able to evaluate this in their supply chain.

Comments from Nordic Ecolabelling

Nordic Ecolabelling thanks you for your comments. Cobalt is not on the list in the EU Regulation on conflict minerals. More than half of the cobalt on the world market is extracted in DRC under hazardous working conditions, where child labor is used, among other things[7][8]. This is why Nordic Ecolabelling has decided to include cobalt in this generation of the criteria. No legal system in the world currently requires companies in the cobalt supply chain to carry out due diligence or disclose their efforts, despite limited legislation calling for disclosure of information on other minerals coming from the DRC and neighboring countries. However, with this new requirement Nordic Ecolabelling wish to affect the licensee to develop and support the development of a common understanding of supply chain due diligence in the cobalt supply chains. As documentation for the requirement, the licensee shall describe their due diligence activities along the supply chain for the five minerals identified.

O6 Sourcing of critical raw materials

EPBA

NiMH batteries' active substances require the use of cobalt and rare earth metals and are to be considered as a critical component. There is currently no viable substitution available which means that these cannot be phased out of NiMH batteries.

Comments from Nordic Ecolabelling

Nordic Ecolabelling thanks you for your comments and aggress that currently there is no viable substitution available for some types of critical raw material, e.g. cobalt in NiMH batteries. Nordic Ecolabelling has not forbidden the use of critical raw materials in the requirement. The background of the requirement is therefore primarily to make the licensees aware of the problem when using critical raw materials. The licensee must have a written policy that describes how they handle the use of critical raw materials in a sustainable way (e.g. collecting used batteries or recycling of raw materials) and in the long run substitutes critical raw materials with other non-critical materials.

Teknologiateollisuus ry

The list of critical raw materials is continuously updated. The newest list given by the commission is published 2017. This requirement must fulfil the materials, which are listed in the newest list. This criteria should apply to substances which are the list.

[7] http://www.swedwatch.org/wp-content/uploads/2017/07/swedwatch_annual_progress_report_2016.pdf (visited 10-10-2017).
[8] Amnesty International, "This Is What We Die For, Human Rights Abuses in the Democratic Republic of the Congo Power the Global Trade in Cobalt", 2016 (visited 10-10-2017)

We expect, that the raw materials should be tied to changing circumstances and that the requirements for critical raw materials should follow the latest list of Commission also in the future.

Comments from Nordic Ecolabelling
Nordic Ecolabelling thanks you and agree in your comments. It has been clarified in the requirement that the requirement is always referring to EUs updated list of critical raw materials[9].

O7 Working conditions

No comments

4.3.3 Packaging and information

O8 Packaging

No comments

4.3.4 Electrical testing

O9 Electrical testing

EPBA
The overall requirements are very ambitious. Although we recognise the importance of challenging criteria to obtain an environmental label, it is also equally important to maintain the distinguishing factor of these labels. When criteria are too strict, the recognition level could decrease. Also, the language used in the requirement is not in line with the applicable IEC standards i.e. the approach on 'full cycles' is different in the proposed criteria than in IEC 61951-2 which could lead to confusion. The terminology of Nordic Swan should therefore be brought in line with the IEC wording.

After internal discussion, we believe the following approach should be considered for the Nordic Ecolabelling of Rechargeable batteries:

1. Follow the test method as it is written in IEC 61951-2 (meaning 60% not 80% remaining capacity) and the IEC definition of cycles (not the full cycle definition in Nordic Swan)
2. Cycle life could be set at 400 for all cells which would be a differentiating factor compared to the IEC standard.

Comments from Nordic Ecolabelling
Nordic Ecolabelling thanks you for your comments. The purpose of the formulating of the electrical testing requirement is to comply with the testmethod in IEC 61951-2. We therefore agree that the definition of cycles is unprecise compared to the IEC standard and the requirement has therefore been adjusted according to the standard. The requirement to the number of cycles obtained when the test is completed has been adjusted from minimum 400 fully charged cycles for NiMH batteries to minimum 75% above the individual batter type requirement level in IEC 61951-2. The requirement for example NiMH battery type AAA (<800 mAh) is minimum 350 cycles.

[9] http://ec.europa.eu/growth/sectors/raw-materials/specific-interest/critical_da (visited 17-04-2018)

O10 Charged battery

EPBA

First and foremost, this proposed criteria can conflict with safety considerations. NiMH standard cells are often shipped in bulk in dense packaging from producers in Asia to Europe. To avoid a thermal runaway during transport, the batteries are purposely not being fully charged. For Lithium-ion batteries, transport regulations (UN3480) for air shipments do exist that limit the state of charge to a maximum of 30%. Although it does not apply if the batteries are received by sea or road transport, it is still recommended to take the limit generally into account, if some of the products in the next distribution step may be shipped via air to the customer base.

Comments from Nordic Ecolabelling

Nordic Ecolabelling thanks you for your comments. NiMH batteries transported by air, sea or road is opposite to lithium batteries not restricted regarding electrical stored capacity (SOC). All NiMH batteries must be securely packed and protected from short circuit. The new requirement for fully charged NiMH batteries supports the trend in the market towards pre-charged batteries (when purchased in the store), which are thereby ready to be used when taken out of the packaging. The definition of pre-charged batteries is though unclear. Nordic Ecolabelling has therefore specified that for NiMH batteries pre-charged = 85% SOC. Regarding lithium batteries/-cells Nordic Ecolabelling agrees that these should be exempted from the requirement because of safety reasons.

Teknologiateollisuus ry

This requirement can be accepted as long as it doesn't cause any dangerous situation of the battery as it is shipped or sold.
Note. Does this requirement also include portable power banks? This is not clear in the text.

Comments from Nordic Ecolabelling

Nordic Ecolabelling thanks you for your comments. The requirement also includes portable chargers (power banks) containing NiMH batteries. This has now been clarified in the requirement.

4.3.5 Safety

O11 Battery safety

No comments

O12 Portable charger safety

No comments

4.3.6 Quality of the battery charger

O13 Quality of the battery charger

No comments

4.3.7 Consumer information

O14 Consumer information on the battery and portable charger

EPBA
As a general principle, EPBA is of the opinion that a thorough assessment should look into all aspects of the battery life and evaluate for which batteries colour coding will have an actual benefit in the content of risk minimisation at the end-of-life stage. In particular, the impact assessment should clearly identify the risks at the end of life stage and should also address whether the problem is related to batteries which are not marked or whether it is rather an issue of impure streams. Although we do not put into question the potential risks that could occur with overheating of or mechanical stress for certain types of batteries, it will also be important to assess to what extent colour coded batteries, especially when still included in appliances, could prevent incidents from happening. In particular the proposed requirement to use the Japanese voluntary scheme cannot simply be copied since there is a concern with the size of the labels.

Comments from Nordic Ecolabelling
Nordic Ecolabelling thanks you and agree in your comments. The text in the requirement regarding marking the battery/battery pack with an international recycling symbol in specific color codes has been removed from the requirement. The EU Battery Directive 2006/66/EC already sets minimum requirements for labelling batteries/batteries pack.

4.3.8 Design of the portable charger

O15 Recyclable design of the portable charger

No comments.

4.3.9 Requirements of the authorities and quality requirements O16-O22

No comments.

5 Comments to the background document, in detail

No comments.

6 Discussions and conclusions

Several consultation comments have been received to the proposed criteria. The comments concentrates on the proposed new and adjusted requirements. Nordic Ecolabelling is grateful for all-round responses.

The main comments apply to the following sections and requirements:

The use of steal
Stakeholders has commented that requirement O3 (requirements applicable to metal in the casing of the battery charger and the outer casing that encircles the batteries/cells in the portable charger) is unclear when it comes to the use of steel. Steel is a metal substance that is an alloy of iron and other elements, such as manganese, chromium, nickel, carbon and so on. The contents of these metals varies but we are talking of small amounts. It has therefore been clarified in the requirement, that steel is only allowed to be used in the base panel that holds the USB and power ports, and only if the steel is coated or covered with e.g. plastic (Avoiding direct skin contact).

CSR requirements regarding the sourcing of conflict-free minerals and critical raw materials
Several consultation comments point out that cobalt is not on the list in the EU Regulation on conflict minerals, and NiMH batteries' active substances require the use of cobalt. Therefore, cobalt should be removed from requirement O5 and O6. Nordic Ecolabelling has not forbidden the use of cobalt or other critical raw materials in the requirements. The background of the requirements is primarily to make the licensees aware of the problems when using conflict and critical raw materials. The licensee must have a written policy that describes how they handle the use of conflict minerals and critical raw materials in the production of batteries.

Electrical testing
EPBA recommend that Nordic Ecolabelling align the definition of cycles according to IEC 61951-2. Nordic Ecolabelling agrees that the definition of cycles is unprecise compared to the IEC standard and the requirement has therefore been adjusted according to the standard. The requirement to the number of cycles obtained when the test is completed has been adjusted from respectively minimum 400 and 500 fully charged cycles for NiMH and Li-ion/LiP batteries/cells to minimum 75% above the individual battery/cell type requirement level in IEC 61951-2 and IEC 61960-3.

Charged batteries
EPBA has commented that the proposed criteria can conflict with safety considerations, especially regarding Li-ion batteries. Nordic Ecolabelling agrees that Li-ion batteries should be exempted from the requirement because of safety reasons. However, NiMH batteries transported by air, sea or road is opposite to lithium batteries not restricted regarding electrical stored capacity (SOC). The new requirement for pre-charged NiMH batteries supports the trend in the market towards pre-charged batteries (when purchased in the store), which are thereby ready to be used when taken out of the packaging. The definition of pre-charged batteries is though unclear. Nordic Ecolabelling has therefore specified that for NiMH batteries pre-charged = 85% SOC.

Table 6: Overview of changes done in the 3th generation of criteria for rechargeable batteries and portable chargers, based on received consultation responses

Requirment	Cunsultation comments	Change in the requirements after the consultation
O3	We question the restriction of zinc, copper and cobalt in the casing of the battery charger. E.g. Co is not yet classified as a CLP CRM substance in every form of its exposure. Ni, Cr and Co is used in stainless steel, where they do not dissolve and therefore not cause any risk.	The requirement has been adjusted so it is clear, that steel is only allowed to be used in the base panel that holds the UPS and power ports and only if the steel is coated or covered with e.g. plastic.
O9	The overall requirements are very ambitious. Follow the test method as it is written in IEC 61951-2 (meaning 60% not 80% remaining capacity) and the IEC definition of cycles (not the full cycle definition in Nordic Swan) Cycle life could be set at 400 for all cells which would be a differentiating factor compared to the IEC standard.	The requirement has been adjusted according to the standard. The requirement to the number of cycles obtained when the test is completed has been adjusted from respectively minimum 400 and 500 fully charged cycles for NiMH and Li-ion/LiP batteries/cells to minimum 75% above the individual battery/cell type requirement level in IEC standards.
O10	First and foremost, this proposed criteria can conflict with safety considerations. NiMH standard cells are often shipped in bulk in dense packaging from producers in Asia to Europe. To avoid a thermal runaway during transport, the batteries are purposely not being fully charged. For Lithium-ion batteries, transport regulations (UN3480) for air shipments do exist that limit the state of charge to a maximum of 30%.	The requirement has been adjusted to only include NiMH batteries. The definition of pre-charged batteries has been clarified to equals minimum 85% electrical stored capacity (SOC).
O14	The proposed requirement to use the Japanese voluntary scheme cannot simply be copied since there is a concern with the size of the labels.	The text in the recuirement regarding marking the battery/battery pack with an international recycling symbol in specific colour codes has been remowed from the requirement.