

ASI Standards Committee – Minutes – Teleconference

Date: 26 September 2017

Antitrust Statement:

Attendees are kindly reminded that ASI is committed to complying with all relevant antitrust and competition laws and regulations and, to that end, has adopted an Antitrust Policy, compliance with which is a condition of continued ASI participation. Failure to abide by these laws can have extremely serious consequences for ASI and its participants, including heavy fines and, in some jurisdictions, imprisonment for individuals. You are therefore asked to have due regard to this Policy today and in respect of all other ASI activities.

Participants:

Chair: Annemarie Goedmakers (Chimbo Foundation).

Committee Members: Catherine Athenes (Constellium), Giulia Carbone (IUCN), Justin Furness (Council for Aluminium in Building), Justus Kammueller (WWF), Bjoern Kulmann (Ball), Jean-Pierre Mean (Indepenent anti-corruption expert), Rosa Garcia Pineiro (Alcoa), Josef Schoen (Audi), Marcel van der Velden (Arconic).

Proxies/Alternates: Justin Furness (Council for Aluminium in Building) proxy for Stefan Rohrmus (Schueco), Giulia Carbone (IUCN) proxy for Tom Maddox (Fauna and Flora International), Rosa Garcia Pineiro (Alcoa) proxy for Jostein Soreide (Norsk Hydro) & Roland Dubois (Rio Tinto Aluminium). **ASI Secretariat:** Sam Brumale, Krista West, Michelle Freesz.

Apologies: Marie-Josee Artist (VIDS - Association of Village Leaders, Suriname), Karl Bath (BMW), Christophe Boussemart (Nespresso), Roland Dubois (Rio Tinto Aluminium), Robeliza Halip (Asia Indigenous Peoples Pact), Philip Hunter (Verite), Adam Lee (IndustriALL Global Union), Jerome Lucaes (Rusal), Tom Maddox (Fauna and Flora International), Brenda Pulley (Keep America Beautiful), Stefan Rohrmus (Schueco), Fiona Solomon (ASI Secretariat), Jostein Soreide (Norsk Hydro), Neill Wilkins (Institute for Human Rights and Business) **Invited:** None

Documents circulated:

- 1. Meeting Agenda (including Meeting Action Log)
- 2. Minutes of previous meeting 13 September 2017 v2
- 3. Updated Log of Feedback and Comments from 2017 Public Consultation
- 4. ASI Performance Standard (Version 2, draft 3b WIP)
- 5. ASI Performance Standard Guidance (Version 1, draft 3b WIP)
- 6. Alternate Form [Word]
- 7. Proxy form for this meeting [Word]

Meeting objectives:

- 1. Adopt minutes of the previous meeting.
- Discuss and review Principle 5 criteria remaining from previous teleconference and Principles 6 8 from the updated Performance Standard (Version 2, draft 3) and Guidance (Version 1, draft 3) with comments from the 2017 public consultation.

Items discussed:

- 1. Preliminaries
 - **a.** Welcome.

- **b.** Apologies and proxies received.
- c. <u>RESOLUTION</u> to accept minutes of previous teleconference meeting held on 13 September 2017 (*version 2*).
- **d.** Review of Actions Log see list at end of Agenda.
 - Feedback regarding Closed Actions 98 and 101:

#	Action	Response / Changes:	Discussion Notes
98	Criterion 4.3a to remain unchanged and the response in the log to reflect this.	Change to the Feedback Log: This point was discussed by the Standards Committee and the criterion remains unchanged. The target is set for internal aluminium process scrap and 100% should be achievable. Criterion 4.3a reinstated with original wording (minor change only): 4.3 Aluminium Process Scrap. The [Entity] shall minimize the generation of Aluminium Process Scrap within its own operations and, where generated, target 100% of scrap for collection, and subsequent recycling and/or re-use. Concept in Performance Standard Guidance (and	Response accepted and no further changes suggested. Response accepted and no further changes
101	Secretariat to review the EPD definition	Concept in Performance Standard Guidance (and Feedback Log) changed as follows: <i>Environmental Product Declaration (EPD)</i> – An <i>EPD is a verified and registered document that</i> <i>communicates transparent and comparable information about the life-cycle environmental impact of products including raw material supply,</i> <i>transport, manufacturing and associated</i> <i>processes.</i> An EPD shall at least cover the product stage, which is 'cradle-to-gate' (as described in EN 15804 Modules A1 to A3). An EPD covering all life-cycle stages including the product stage, installation into the building, use and <i>maintenance, replacements, demolition, waste</i> <i>processing for re-use, recovery, recycling and</i> <i>disposal, and disposal is said to be 'cradle-to- grave' (as described in EN 15804 Modules A to C).</i> <i>Consideration of environmental aspects resulting</i> <i>from reuse, recovery and recycling at end of life,</i> <i>is very important in relation to the circular</i> <i>economy and should be part of a 'cradle-to-</i> <i>grave' EPD (as described in the optional Module D</i> <i>in EN 15804). Further, any comparison of</i> <i>construction products on the basis of their EPD is</i> <i>defined by the contribution they make to the</i> <i>environmental performance of the building.</i> <i>Consequently, comparison of the environmental</i> <i>performance of construction products using EPD</i> <i>information shall be based on the product's use in</i> <i>and its impacts on the building, and shall consider</i> <i>the complete life cycle, which is organised into</i> <i>the separate modules A to D (adopted based on</i> <i>ISO 14025 and EN 15804).</i>	Response accepted and no further changes suggested.

2. Standards Committee Update

- **a.** Auditor Accreditation We have received our first application from a CAB requesting ASI Accreditation, with more expected next month.
- **b.** Registered Specialist The ASI Registered Specialist Procedure (and Form) has been posted on the website. One application received.
- c. Pilot Period due to a server switch with our host there were some problems with members initializing assessments. This is being addressed by the host. Otherwise we have received constructive feedback and some suggestions for improvements.

3. ASI Normative Documents and Public Consultation

- Performance Standard and Guidance on Principle 5 GHG Emissions (continued from last meeting) Discussed and reviewed updates and comments related to Principle 5 GHG Emissions in the ASI Performance Standard (Version 2, draft 3b WIP) and Performance Standard Guidance (Version 1, draft 3b WIP):
 - It was noted that some of the items in the comments log were not included in the teleconference presentation as these were either minor, easy to respond to and did not affect the intent of the standards. However, all comments are noted in the comments log circulated to all Committee members and published on the ASI website.

Feedback:	Comments & Proposed changes:	Discussion Notes
 GHG Emissions Guidance Introduction 12 t CO2eq per metric tonne needs a definition [reference]. 	Have added in some missing words to clarify. The reference link was to an article here: <u>http://www.aluminiumtoday.com/news/view</u> /aluminium-part-of-a-sustainable-future.	Response accepted and no further changes suggested.
 Criterion 5.1 Disclosure of GHG emissions and energy use Guidance Recommend to add "imported" electricity as electricity could be purchased or otherwise for Guidance about Scope 2 calculations. 	Added as follows: <i>"When determining Scope 2 GHG emissions for consumption of purchased <u>/ imported</u> <i>electricity, "</i></i>	Context of the term 'imported' was discussed but response accepted and no further changes suggested.
 Criterion 5.1 Disclosure of GHG emissions and energy use Guidance Need guidance on reporting scope 1 (direct) or scope 2 (indirect) emissions that are produced NOT for Aluminium production but rather for other business activities such as production of electricity or water for clients/communities. 	Following added to the Guidance: <u>When Scope 1 and/or Scope 2 emissions are</u> <u>produced to provide non-Aluminium</u> <u>products and services to clients they can be</u> <u>reported separately. For example, this</u> <u>could be for other business activities such as</u> <u>production of electricity or water for</u> <u>clients/communities, or when an Entity</u> <u>imports and exports electricity with the</u> <u>public grid as part of an energy exchange</u> <u>program with a net zero approach over an</u> <u>agreed reporting cycle.</u>	Response accepted and no further changes suggested.
 Criterion 5.3 GHG emissions reductions Need to be specific which IPCCC assessment report GWP values to be used (i.e. 2nd or 4th assessment report). It will help in maintaining consistency in conversion of physical units to CO2 equivalent Needs guidance on which GWP to use – IAI uses IPCC AR4 for PFCs (2007) but AR5 are latest published by IPCCalso need guidance for when to change and time series' 	Added the following for clarification to the Guidance chapter (and Glossary): CO_2 equivalent (CO_2 -eq) – GHG emissions can be expressed either in physical units (such as tonnes) or in terms of CO_2 equivalent (tonnes CO_2 equivalent).The conversion factor from physical units to CO_2 equivalent is the global warming potential (from the latest published IPCC report) of the corresponding GHG. (Adapted from UNFCCC)Industrial designation Cop entrial formulaOver the for 100-year time horizon form the latest published IPCC report) of the corresponding GHG. (Adapted from UNFCCC)Industrial designation extension entrial entrial Cop the core in the second matching and the second matching and the second matching (Adapted from UNFCCC)Industrial designation entrial entrial (Cop NOOver the for 100-year time horizon for the second matching and the second matching and the second matching and the second matching and the second matchingIndustrial designation condition to the second matching and the second matching an	Response accepted and no further changes suggested.

Feedback:	Comments & Proposed changes:	Discussion Notes
Criterion 5.3 GHG emissions	At the GHG Working Group teleconference of	Response accepted and no further changes
reductions	July 11, there was considerable discussion	suggested.
 This criterion is 	around the extent that the ASI GHG criteria,	
inconsistent – in its	namely the 8 tonnes CO2-eq per metric	
quantitative structure	tonne Aluminium target by 2030 for existing	
and exclusion of more	smelters and 8 tonnes CO2-eq per metric	
than half global capacity	tonne Aluminium target by 2020 for new	
– with the rest of the	smelters would actually incentivise	
performance standard. It	companies to reduce carbon emissions and	
creates the perception	as a whole contribute to the low carbon	
that certain operations	economy. The discussion noted that the	
are excluded and would	current criteria was a starting point and	
have no viable path to	could be used as a threshold to differentiate	
achieve certification.	aluminium from low carbon energy sources	
achieve certification.		
	from those with high carbon energy supply.	
	It was noted that other criteria in section 5	
	did require members to implement measures	
	to reduce carbon emissions but there were	
	no set reduction targets. It was further noted	
	that more needed to be done to	
	demonstrate carbon emission reductions	
	directly related to ASI certification. ASI plans	
	to undertake a Study to address the	
	implications of the COP21 agreement to	
	review what a 1.5 degree and 2 degree GHG	
	emissions trajectory would look like for the	
	aluminium sector. It was agreed to review	
	the scope of this Study to see how much	
	impact the existing criteria would have in	
	achieving the 2 degree limit.	
	Re a path to certification, the Guidance does	
	note that the plan under 5.3b "can include	
	the purchasing of renewable energy in the	
	smelter management system to count	
	towards controlling Scope 1 and 2 GHG	
	emissions, and it should be in line with the	
	GHG Protocol (version released 2014) or	
	comparable." The viability of this will of	
	course depend on costs and availability of	
	these low-carbon forms of energy in the lead	
	up to 2030.	
Triterion 5.3 GHG emissions	Minor revision was not intending to re-open	In general, the feedback response was
eductions	discussions about the number, but do want	accepted and no further changes suggested
	to add history as to why it was selected. See	However, it was noted that the rationale for
8 t CO2eq per metric	also below comment from WWF.	the 8 tonne CO_2 -eq threshold determined
tonne needs a definition		during the development of Version 1 of the
The scientific rationality	Note that [2/h) does apply to all Droduction	Performance Standard be recorded. Memb
of a cap of 8 tons CO2e is	Note that 5.2(b) does apply to all Production	
not clearly explained in	and Transformation companies applying the	including IUCN that were part of the former
the Performance	Performance Standard.	Standards Setting Group will provide the AS
Standard Guidance		Secretariat with some brief notes of how th
document. The scientific	However basis for 8 tonne CO_2 -eq should be	threshold was determined and negotiated.
basis of such an	documented.	
important indicator		There was further discussion and broad
needs to be well		agreement that the Greenhouse Gas Worki
explained. Otherwise, the		Group be tasked with developing guidance a
number would be at risk		methodologies to support Entities througho
		the supply chain (especially for downstream
of being viewed as a		entities where there is a lack of guidance)
random selection, a		establish context based and meaningful GHG
"negotiated" number, or		reduction targets, based on scientific ration
a "deal".		
The cap effectively		This work will make use of representatives
blocked the pathway of		from industry and civil societies and externa
		expertise. It was noted that this work shoul
the majority of smelting		
the majority of smelting capacity built during the		
		leverage from the Working Group expertise currently looking at the ASI study to review implications of the COP21 agreement

Feedback:	Comments & Proposed changes:	Discussion Notes
 coal fired power and has an estimated scope 1&2 GHG intensity of 13-17 tons of CO2e per ton of aluminum smelting, from being possibly certified. The geopolitical consequences of this cap needs to be reconsidered and re-evaluated. In order for the ASI to be a credible standard, especially to industrial downstream users in western countries (e.g. Germany / Automotive), adequate science-based targets must be included into the standard at an earlier date than 2022. Furthermore, the target groups for climate targets should include not only the smelters, but the entire aluminium value chain Special focus should be put on the creation of renewable energy capacity at the source of 		regarding the 2 degree GHG emissions trajectory for the aluminium sector. ACTION: Basis for the 8 t CO ₂ eq per metric tonne incorporated into version 1 of the ASI Performance Standard to be recorded. ACTION: Secretariat to facilitate expansion of the GHG Working Group's terms of reference to include guidance and methodologies to support Entities throughout the supply chain establish context based and meaningful GHG reduction targets, based on scientific rationale.
 energy usage (e.g. smelters). Criterion 5.3 GHG emissions reductions Guidance The Guidance for 5.3b significantly narrows the scope of what could be certified. The criterion requires less than 8 t/t from 2030. The guidance narrows this to a requirement to immediately have a plan to reach 8 t/t in 2030. Given long-term electricity contacts and limited options for electricity supply in many regions this represents a material change in the criterion. Some operations would have no viable path to achieve certification. Remove or change the requirement for a plan 	This was a specific proposal from the GHG Working Group to include this wording. Discuss whether adding 'or strategy' opens up possible approaches : Have defined and are implementing <u>a</u> <u>strategy or</u> a plan aimed at reducing Scope 1 and 2 GHG emissions below 8 tonnes CO2 -eq per metric tonne of aluminium by 2030.	Response accepted and no further changes suggested.

b. Performance Standard and Guidance on Principle 6 Emissions, Effluents and Waste – Discussed and reviewed updates and comments related to Principle 6 Emissions, Effluents and Waste in the ASI Performance Standard (Version 2, draft 3b WIP) and Performance Standard Guidance (Version 1, draft 3b WIP):

Feedback:	Comments & Proposed changes:	Discussion Notes
 Principle 6 Wording of principle is hazard based, categorizing emissions as adverse/non-adverse 	Have amended the principle as follows: The [Entity] shall minimize emissions and effluents that have <u>the potential</u> to adversely <u>impact</u> effects on human <u>health</u> <u>and safety</u> or <u>that of</u> the environment, and manage waste according to the waste mitigation hierarchy.	Response accepted and no further changes suggested.
 Glossary In the United States, the term is called "Salt Cake". The term needs to be added. 	Added salt cake to the definition of salt slag: <u>Also knowns as 'salt cake'.</u>	Response accepted and no further changes suggested.
 Guidance for Criterion 6.1 Emissions to Air "Enable the participation of concerned indigenous people" may be problematic if they choose not to participate. Also appears elsewhere in Guidance (6.2, 6.3, etc.) 	As discussed by the Environmental Impacts WG, have added to the Guidance for 6.1: <u>where they desire".</u> Note we have made the same addition to the Guidance for criteria 2.5, 6.2, 6.3, 7.1 and 7.2).	Response accepted and no further changes suggested.
 Guidance for Criterion 6.1 Emissions to Air No atmospheric air quality emissions targets have been set, which could result in ASI certified operations operating in developing countries not implement good practice air quality management. Suggested that mining operators protect and maintain pre-mine air quality conditions by meeting other air quality standards (e.g. EU Numeric Air Quality Stds, Noise emissions meet draft IRMA Std, etc., 	The criterion applies to a very wide range of businesses and operating locations, across the supply chain. The criterion references the need to disclose air emissions and develop plans, and the Guidance already notes that these plans need to include benchmarked targets and milestones (i.e. time-bound). So the location of operations is independent of applicable law being stringent or otherwise - the test is whether there are adverse impacts or not. The Guidance makes reference to "Where a set of best practice values exists for a specific region and/or industry, these should be integrated within the emissions reduction plan" Have added: - Ensure that you meet or exceed applicable air quality standards. - In the absence of relevant local air quality standards, the Entity should aim to meet prevailing international standards for air emissions and ambient air quality. Noise is referred to under the Biodiversity and Local Communities (9.7) sections.	In general the response accepted and no further changes suggested. However there was a suggestion to ensure the Guidance includes the importance of accounting for cumulative effects of emissions to the local air-shed noting the relative contribution from other sources. It was also noted that relevant air discharge standards as well as atmospheric air quality standards be included as references in the Guidance. ACTION: Guidance for criterion 6.1 to be reviewed to add notes around cumulative impacts to air quality. ACTION: Guidance for criterion 6.1 to include (where available) relevant references that cover air emission standards and atmospheric (air quality) standards.
 Guidance for Criterion 6.2 Discharges to Water No water quality emissions targets have been set, which could result in ASI certified operations operating in developing countries to not implement good practice air water management. The operating company should be required to demonstrate that it protects current human and ecosystem health 	As per comment for 6.1, the criterion applies to a very wide range of businesses and operating locations, across the supply chain. The criterion references the need to disclose water discharges and develop plans, and the Guidance already notes that these plans need to include benchmarked targets and milestones (i.e. time-bound). So the location of operations is independent of applicable law being stringent or otherwise - the test is whether there are adverse impacts or not. Similar additions (as for 6.1) have been made under 6.2, and references made to bauxite mining activities and the ICMM references.	Response accepted and no further changes suggested.

Feedback:	Comments & Proposed changes:	Discussion Notes
 and future end-uses of water (quality and quantity). Detailed criteria can be found in the ICMM water stewardship framework, IRMA Standard for Responsible Mining v2.0 and the ICMM guide to water reporting. 	Note reference to IRMA Standards has not been included until the standard and drafts are finalised.	
 Criterion 6.5 Waste management and reporting Having a "waste management strategy" is a very low bar. It does not suggest any need for performance of any level. There needs to be stronger language around performance. Suggest alternative wording: The [entity] shall establish contextually- meaningful, time- bounded targets for reducing and/or eliminating emissions and effluents for each endpoint (i.e., air, water, land, etc) 	As per 6.1 and 7.1, it is difficult to set performance requirements across supply chain. However have added the following in the Standard: <i>a. The [Entity] shall implement a waste</i> <i>management strategy to minimise adverse</i> <i>impacts of Wastes on humans or the</i> <i>environment.</i> Also modified Guidance including the addition: • <u>Develop benchmark targets and</u> <i>milestones for the waste management</i> <i>strategy to deliver contextually</i> <i>meaningful improvements over time</i> <i>adverse impacts to humans and/or the</i> <i>environment.</i> Also for clarification, included a definition of Waste as follows: <u>Hazardous and Non-Hazardous Waste' (as</u> <i>per those definitions).</i> Criteria 6.1 and 6.2 cover the air and water	There was discussion about the benefit of the suggested additional text especially in relation to the subjective term 'minimise'. There was further discussion about the importance of not introducing unnecessary complexity to the ASI Performance Standard when responding to comments received during the public consultation process. Also, there was clarification around the purpose of the Principle statements as context setting and that it was not always necessary to repeat this context within the criterion unless it provided clarity for Entities and auditors. It was recommended that the suggested additional text for criterion 6.5a be reviewed to reflect the meaningfulness of the waste management strategy such as the adoption of the waste mitigation hierarchy.
 Criterion 6.6 Bauxite Residue The standard does not specify when specific management actions should occur for wet tailings storage facilities. Will high risk facilities be certified by the ASI? If so this could result in a certified high risk facility failing and severely damaging the ASI and all stakeholders Risk assessment criteria and appropriate management responses should be included within the standard, as well as dam design protocols. Different management responses should be required for facilities designated as high risk/critical facilities, i.e. wet storage facilities in areas prone to earthquakes, facilities with dam walls over X m high, areas prone to cyclone events. 	emissions. There is a specific reference included in the Guidance to the IAI / European Aluminium publication ' Bauxite Residue Management: Best practice' (2015) for design and operational recommendations that aims to recognise and promote best practices for the sustainable management of bauxite residue storage facilities. There is also a reference to the (ICMM) Review of Tailing Management Guidelines and Recommendations for Improvement (2016), which points to the need for an increased emphasis on governance, in addition to existing technical and management approaches. Examples of risk-based controls are included in the Standard and discussed in the Guidance, such as regular checks/monitoring - including by third parties with appropriate independent expertise, ensuring the frequency of these is scaled to the risk of the facility etc. Have also added reference to the importance of design, construction and maintenance of storage areas, and more detail on specific practices, drawing from the Guidance.	Response accepted and no further changes suggested.

Feedback:	Comments & Proposed changes:	Discussion Notes
for such facilities could		
include, 3rd party review		
of dam designs, a		
requirement for periodic		
3rd part inspection,		
additional monitoring		
requirements.		
For mine tailings		
infrastructure that is considered "Critical" an		
Independent Tailings		
Review Board (ITRB),		
composed of at least		
three independent		
experts, shall be formed		
to review all tailings		
impoundments		
constructed to retain wet		
tailings during mine		
operation in order to		
provide third-party		
recommendations on the		
design, construction,		
operation and closure of		
tailings impoundments.		
The ITRB shall meet at a		
frequency that it deems		
necessary to ensure		
safety, but no less		
frequently than every five		
years.Detailed criteria and BAP		
can be found in Chapter		
3.3 – Mine Waste		
Management of the IRMA		
Standard for Responsible		
Mining v2.0 and the EU		
Directive on management		
of waste from extractive		
industries.		
Criterion 6.6 Bauxite	Yes, these criteria apply to operating/active	Response accepted and no further changes
Residue	alumina refining facilities that seek ASI	suggested.
• Does this include existing	Certification.	
storage areas? Some of	Legacy sites would not normally be included	
the older ones at active	in a certification scope if they are not	
refineries aren't lined or	producing. The ASI Standards aim to cover	
base drained – and this	active production, so as to be able to	
isn't something that can	incentive change in these production	
easily be retrofitted. Also	practices.	
are legacy sites included in this?	Where there are bauxite residue storage	
III UIIS:	areas that either (i) do not effectively	
	prevent the release of bauxite	
	residue/leachate to the environment, (ii) do	
	not control water discharges or (iii) discharge	
	to marine or aquatic environments, then	
	these would not meet the requirements for	
	certification and corrective action would be	
	required to achieve conformance. Not	
	having a lining or base drainage system does	
	not necessarily mean that controls to	
	prevent release/discharges cannot be	
	achieved in other ways e.g. groundwater	
	monitoring and leachate pumping. This has been expanded in the Guidance as follows:	
	 Older facilities may have storage areas 	
	o <u>older jaelinges may have storage areas</u>	

Feedback:	Comments & Proposed changes:	Discussion Notes
Guidance for Criterion 6.6b	that were constructed without a liner or base drainage system. Other controls to prevent releases/discharges of bauxite residue/leachate to the environment may include groundwater monitoring and leachate pumping bores.There was some mention in the Guidance, but this head age dealed as follows:	Response accepted and no further changes
 Bauxite Residue Need to expand/define third party audit. Some sites use a different division of the parent company to audit or contractors. 	but this has been expanded as follows: • <u>Regular checks and controls should be</u> <u>conducted internally, and by third</u> <u>parties. For example, these could</u> <u>include visual daily inspections for cracks</u> <u>by internal personnel, other internal</u> <u>audits, and periodic external</u> <u>assessments by</u> <u>geotechnical/engineering experts. The</u> <u>frequency of these should be adequate</u> <u>to the type of residue storage. For</u> <u>example, lagooning has a higher degree</u> <u>of risk to maintaining ongoing storage</u> <u>integrity than dry storage.</u>	suggested.
 Criterion 6.6c Bauxite Residue This is a bit vague. Discharge criteria differ significantly – even from sites 200 m apart and discharge pH may not necessarily be 'neutral'. Perhaps amend to state that it must conform to local regulatory discharge criteria. Suggest alternative wording: Control and neutralise water discharge from Bauxite Residue storage in conformance with local regulatory discharge criteria. 	 This was discussed at an Environment Working Group meeting, and the following has been added to 6.6c: 6.6c. Control and neutralise water discharge from Bauxite Residue storage, to minimise environmental impacts to the local environment. Also added Guidance for 6.6c: Water discharge can include surface run-off or groundwater that has been impacted by leachable substances from the bauxite residue. Such discharges must be controlled and in some cases require neutralisation. Partial or complete neutralisation can be achieved by the use of acids (normally sulfuric acid or hydrochloric acid), carbon dioxide, sulfur dioxide, sea water or concentrated brines. Neutralisation of the bauxite residue with the deposit and can aid re-vegetation of the land during restoration. In some coastal locations, leachate is treated with sea water to such a level that it can be released back to the sea or estuary under controlled conditions, and in accordance with regulatory requirements. In the absence of local regulation addressing this, such releases should be managed in accordance with prevailing international standards. 	Minor suggestion to remove the word 'local' from the added phrase. Otherwise, the response accepted and no further changes suggested. ACTION: Remove the word 'local' from the revised criterion 6.6c.
 Criterion 6.6e Bauxite Residue and Guidance Use of elimination is unclear – could imply that current lagooned residue needs to be dry stacked, filtered etc Assume this means that sites should stop lagooning and establish other storage methods. 	Have edited 6.6e as follows: e. Establish a timeline and a roadmap for the elimination of Bauxite Residue lagooning in favour of state of the art technologies for <u>Bauxite Residue storage</u> or re-use of <u>the Bauxite Residue</u> . [Any Alumina Refining facility starting production after 2020 shall] only use <u>state</u> of the art technologies for Bauxite Residue storage or re-use of the Bauxite Residue. dry stacking or dry disposal or re-use the Bauxite Residue.	Response accepted and no further changes suggested.

Feedback:	Comments & Proposed changes:	Discussion Notes
lagooning would be best		
practice for unneutralised	Have also clarified this in the Guidance as	
bauxite residue, there	follows:	
isn't any provisions made for the use of other best	• <u>For 6.6(e):</u>	
practices where	 For 6.6(e), 'elimination' of bauxite residue lagooning refers to phasing 	
eliminating all lagooning	out this practice for new	
isn't practical. [Some]	impoundment areas, but does not	
operating refineries use	require re-construction of the	
the best practice of sea	previously constructed bauxite residue	
water neutralisation prior	lagoons into an alternative storage	
to the residue being	facility or re-processing of the residue.	
stored in the dam.	• State of the art technologies for	
Neutralising the residue	bauxite residue storage currently	
drastically reduces the	include dry stacking, dry disposal, or	
long term risks and legacy	neutralisation of the residue. Other	
issues associated with	technologies may also emerge over	
storage of bauxite	<u>time.</u>	
residues. Prior to	 <u>Bauxite residue re-use is an emerging</u> process with anvironmental banafits 	
closure, the elimination	process with environmental benefits. Commercial viability varies on a case	
of ponding or lagooning would need to occur to		
ensure the structural	<u>by case basis.</u>	
stability of the damn in		
perpetuity but during		
operations, it isn't		
practical. The wet		
processes of sea water		
neutralisation also		
eliminates caustic residue		
dust issues that often		
plague dry stacking		
operations.		
Suggest alternative		
wording:		
"Establish a timeline		
and a roadmap for the		
elimination of Bauxite		
Residue lagooning for		
new impoundment areas in favour of state		
of the art technologies		
or re-use."		
Criterion 6.6f Bauxite	Legacy sites would not normally be included	Response accepted and no further changes
Residue and Guidance	in a certification scope if they are not	suggested.
Not clear which	producing. The ASI Standards aim to cover	Suggesteu.
provisions apply to	active production, so as to be able to	
legacy sites, i.e. existing	incentive change in these production	
storage areas of bauxite	practices. This has been added as to the	
residue associated to	Guidance.	
facilities not any longer in	Also added to the Guidance is a cross	
operation	reference to criterion 8.5 on Mine	
	Rehabilitation:	
	• The guidance for criterion 8.5 on mine	
	rehabilitation may be relevant in relation	
	to bauxite residue area remediation.	
	And in line with changes to 6.6e, edited 6.6f	
	as follows:	
	<i>f.</i> [Remediate the] Bauxite Residue area	
	after closure [of the Alumina Refining	
	facility] <u>to a state that can adequately</u>	
	mitigate the risk of future environmental	
	contamination.	
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Feedback:

Criterion 6.7 Spent Pot Lining

- The requirements specified in a, b and c are appropriate and they should as a minimum be maintained by all means also after the consultation.
- Possible confusion among the obligations for treated and untreated SPL
- Recommend to include points regarding the temporary or long term onsite storage of SPL and to minimise any impact due to SPL storage. For example add "Entity shall have constructed storage areas to effectively prevent the release of SPL or leachate to the environment. "
- Need to clarify frequency of review of alternate options
- The requirement to "maximise recycling" needs some reference to feasible/reasonable cost in the guidance.
- Logic of criteria leads to missing bucket for untreated SPL...if maximizing treatment and no discharge of treated to water then stands to reason that untreated not discharged too.
- Points to consider in Guidance "...for example to enable a cement plant to justify their conversion to receiving this material."
- "economically feasible" is very unspecific .
 Benchmark with total cost for landfilling including long-term liabilities and risk premiums.
- Add new criterion 6.7d relating to transportation risks

Comments & Proposed changes:

Have made changes to Standard and Guidance to accommodate these comments:

- 6.7 Spent Pot Lining (SPL): [An Entity engaged in Aluminium Smelting] shall: a. <u>Have constructed storage areas to</u>
- effectively prevent the release of SPL or leachate to the environment.
- b. Maximise treatment <u>of SPL</u>. and] recycling of carbon and refractory parts from SPL
- c. Maximise recovery and] recycling of carbon and refractory parts from SPL <u>materials</u>.
- d. Not landfill untreated SPL.
- e. Demonstrate that they [regularly] <u>FR</u>eview <u>at least annually</u> alternative options to landfilling of [treated] SPL <u>and/or stockpiling of SPL</u>.
- f. Not discharge [treated] SPL to fresh water or marine <u>or aquatic</u> environments.
- g. <u>Minimise risks associated with off-site</u> <u>transportation of SPL</u>.

Also made major changes and additions to the Guidance including::

- Develop and implement a management plan with targets relating to treatment of end-of-life.<u>Treatment methods</u> <u>should focus on addressing the</u> <u>hazardous properties and quantity of</u> <u>generated SPL.</u>
- Seek to maximise recycling of carbon and refractory parts <u>for other industries</u> <u>of SPL or treated SPL by-products.</u>, <u>Maximising recycling includes</u> <u>considering availability of cost-effective</u> alternatives.
- <u>Benchmark SPL management</u> <u>alternatives and identify 'best available</u> <u>technology', considering the total costs,</u> <u>including long-term liabilities and risk</u> <u>premiums.</u>

Discussion Notes

It was agreed to combine criterion 6.7b and c into one criterion. For example (only):

Treat SPL to maximise the recovery and recycling of carbon and refractory materials.

As noted previously it was noted that changes or additions to the Standard as a result of comments and feedback should avoid introduction of unnecessary complexity. For instance the addition of the criterion relating to transportation risks may not be necessary as transportation within regional boundaries or transboundary movements is highly regulated. However, it was noted that inclusion of the transport related criterion was not problematic. It was agreed to review this section and seek responses from Committee Members with smelting activities.

Action: Secretariat to work with the Committee Members with smelting activities to review the proposed changes to the criteria in 6.7 with due consideration to the comments received.

Feedback:	Comments & Proposed changes:	Discussion Notes
Guidance for Criterion 6.8	Have added this to the Guidance:	Response accepted and no further changes
Dross		suggested.
• This Guidance regarding	\circ Treatment should seek to maximise the	
"Dross" and "Dross	recovery of aluminium and the recycling	
Residues", such as "Salt	of treated dross residues. <u>The recovery</u>	
Slag" or Salt Cake,	rates will vary according to available	
recognizes that in most	technologies and processors, and the	
cases specialized	nature of the dross and dross residues.	
processors, who are	It is acknowledged that in some regions,	
normally third parties,	on-site or third-party processors may not	
are used to further	be available or practicable.	
process residues. These		
processors employ		
technologies, potentially		
contemplated in both the		
Standard and Guidance		
document, which may		
vary in the degree that		
such technology is able to		
"maximize" recovery and		
"maximize" the recycling		
of "treated Dross		
residues".		
 It is not evident from the 		
Guidance how		
"maximize" will be		
determined to assure		
conformance with this		
section. It is clear that the		
section is not intended to		
identify, recommend or		
promote specific		
technologies or		
processors		
Even more important to the implementation of		
the implementation of		
this section for a global standard is that these		
third parties with		
· · · · · · · · · · · · · · · · · · ·		
different processor technologies may not		
exist or be available in all		
regions of the world. The		
potential interpretation		
of the Guidance and the		
Standard regarding this		
topic may create an		
immediate and significant		
economic barrier to		
conformance with this		
important section		
regarding "Dross" and		
"Dross residues."		
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- c. Performance Standard and Guidance on 7 Water Stewardship Discussion and review of the comments related to Principle 7 Water (Stewardship) in the ASI Performance Standard (Version 2, draft 3b WIP) and Performance Standard Guidance (Version 1, draft 3b WIP) commenced. However, due to time constraints, the discussion will continue at a follow-up Committee meeting. Before the meeting ended, the following key points were noted:
 - The need to rename the Principle to Water Stewardship was not understood or seen as necessary.
 - There was some discussion around whether the criteria would benefit from introducing the concept of 'water stress' directly into criterion 7.1. However it was

acknowledged that this may be included in the scope of identifying and assessing 'water-related risks' as explained in the Guidance.

- A follow-up suggestion was to provide further context around the water-related risks as well as the importance of addressing not just risks that the value chain has on water resources, but also risks to Entities and communities from water related risks such as poor water quality or water scarcity.
- At this time the meeting time ran over and therefore discussion on the water related comments will continue at a future committee meeting.

Action: In preparation for the ongoing discussion about the water related comments, the Secretariat will present the suggested changes and responses to the feedback with due consideration to the above discussion points (i.e. water stress, water stewardship, context based assessments, etc.).

d. Performance Standard and Guidance on Principle 8 Biodiversity – As noted previously, as the meeting time was over, it was agreed to review the comments relating to Principle 8 Biodiversity at a future teleconference.

4. AOB

a. No other business.

5. Next Committee teleconferences:

- **a.** Next meeting:
 - Tuesday 10 October 2017 (comments for Performance Standard Principles 9, 10 & 11)
- **b.** Remaining meetings for 2017:
 - Wednesday 25 October 2017 Outstanding issues.
 - Extra Meeting Tuesday 21 November 2017 Target finalisation of normative documents for Board endorsement (and translation)
 - Wednesday 6 December 2017 Work planning for 2018.