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| To: PAP |
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LIAISON NOTE

Proposals for enhancing Environmental Sustainability

# INTRODUCTION

At PAP42 the topic of Sustainability was discussed and ideas sought from committees as to what IALA members could do and what principles IALA could promote to reduce the carbon footprint and impact on the environment within the role of AtoN provision.

This request from PAP is set against the recent IPCC Assessment Report 6 dated August 2021 where the opening summary states:

“*It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred.”*

The report goes on to make sobering reading.

ENG14 committee members were asked to come up with proposals, no matter how radical or “off the wall” they may be to present to PAP for consideration, it is clear to any reader of the IPPC AR6 report that the world can not go on as it has been doing and whilst AtoN provision does not rank high in the league of environmental impact and it actually plays a part in reducing man made environmental disasters, there is always room for improvement.

# Proposals for consideration

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1. Manufacture AtoN that have a log life and will withstand new technology being installed in them rather than throw them away after 5 or 10 years. Make AtoN that are maintainable for this and not so disposable. IALA could produce a Guideline on this topic to support manufacturers and designers produce AtoN which are repairable and fit for a long life. This should then be a factor in the selection of the equipment.
2. Promote the use of Virtual AtoN in place of physical ones, particularly remote AtoN that require a ship or helicopter to attend. The ship or helicopter are expensive to operate and carry a high environmental impact. Why are we still placing buoys in the water when AIS is readily available and low cost receivers and display is available to even a small leisure vessel?
3. Provide guidance on the overall life cycle environmental impact of particular AtoN or service. For example, take a simple 2.5m diameter buoy with a 5 mile self contained lantern; the environmental impact to over its life to :
   * Manufacture
   * Install
   * Maintain
   * Inspect
   * Battery change
   * Repair
   * Remove
   * Dispose

These may be considered at the procurement stage in a mature and forward thinking company in terms of cost but the assessment in terms of overall life cycle environmental impact is rarely considered. This is because it is difficult to understand the overall through–life environmental impact of an item. Take for example uPVC (plastic) window frames. They last for say 40+ years and once installed do not need painting or regular maintenance BUT they take energy to make and are often sent to landfill at the end of their life: therefore it is difficult to know what to do for the best environmental outcome. Could IALA provide guidance on how to assess the environmental impact of equipment to guide manufacturers, designers and the selection for procurement.

This is not a straightforward task and is a complex multifaceted topic (through life emissions, energy, landfill, toxins, etc).

1. Use of Drones for inspection. This can remove the need to send a ship or helicopter for inspection and save large amounts of fuel. This is carried out in some authorities already and should be promoted for all authorities to do.
2. Review how IALA meetings are held. While it is clear having people in the same room aids discussion and helps nurture relationships, we’ve seen how it is possible to work remotely through the new IALA tools. A reduction in the travels of IALA members twice a year would reduce the amount of CO2 emissions related to hosting IALA meetings and events. It is proposed that a balanced approach is considered as the relationships and in-person discussions are also important. Do both meetings a year need to be in person? Could workshops/seminars be held virtually?

# Action required

The PAP is invited to consider these proposals.

Input from WG1 & WG3