



## **PLANNING OF GESAMP ACTIVITIES:**

### **IMPACTS OF WASTES AND OTHER MATTER IN THE MARINE ENVIRONMENT FROM MINING OPERATIONS, INCLUDING MARINE MINERAL MINING**

#### **Report of the Chair of Working Group 42**

1 The Chair of the working group, Ms. Tracy Shimmield attended GESAMP 45, hosted by the Food and Agriculture Organization (FAO) at its Headquarters in Rome, Italy from 17 to 20 September 2018.

2 Ms. Shimmield gave a presentation on the impacts of discharging mining waste in the ocean and the possible impacts of seabed mineral mining. The final section of the presentation listed the members of the working group the finalised Terms of Reference as well as progress to date.

3 There was some discussion regarding the Terms of Reference and further discussion with the ISA's Director of Environment. The GESAMP membership confirmed that the Terms of Reference were as finalised at the Geneva meeting in 2017.

4 The draft report is developing but at a slower rate than expected. There are two main reasons for this, firstly the group has only met together in person once at the start of the project and secondly the majority of the members are currently active scientists with limited time to devote to the production of the report. However, having active researchers involved has ensured that the most recent research and developments are being included in the report.

5 At the time of writing this report, Ms. Shimmield is drawing together the working group members' input to produce a final draft of the report for wider input.

6 The group has been active in promoting the work that is being undertaken by WG 42 and the following table indicates meeting/conferences and cruises that the members of the group have been involved.

Date	Event	Members
23/04/18	UK Parliamentary and Scientific Committee meeting briefing Deep Sea Mining, London	Tracy Shimmield
10/09/18	Deep-Sea Mining: Challenges of Going Further and Deeper Advances in Marine Research and Subsea Technology Beyond Oil and Gas, Norway	Hannah Grant
09/2018	The Deep Sea Biology Symposium, Monterey	Bronwen Currie, Andrew Sweetman
31/10/18	Department for Business, Energy & Industrial Strategy Deep Se mining Working Group, London	Tracy Shimmield
01/11/18	GESAMP Poster Marine Minerals conference, The Geological Society, London	Hannah Grant, Tracy Shimmield and James Hein

Nov and Dec 2018	Deep Sea Mining workshop developing policy paper for UK Cabinet Office, London	Tracy Shimmield
23/01/19	Brian Lovell Conference, London. Deep Sea Mineral Deposits	Tracy Shimmield
12/02/19	Deep Sea Mining workshop, Department for Environment, Food & Rural Affairs	Tracy Shimmield and Andrew Sweetman
11/03/19	Best Available Technology for Deep Sea Tailings Placement, Norway	Tracy Shimmield
29/04/19	Deep sea Mining Conference, London	Tracy Shimmield
30/04/19	The 3rd International Critical Metals Conference (Mineralogical Society of Great Britain), London	Hannah Grant
14/05/19	NYKOS, A research project for the future mineral industry, Norway	Tracy Shimmield
23/05/19	3rd MSMNE Symposium on German Exploration Activities for Marine Mineral Resources, Berlin	Hannah Grant
08/19	One Ocean Hub meeting Cape Town, South Africa	Andrew Sweetman and Bronwen Currie

7 A new member joined the group in 2018. Ms. Hannah Grant who has 11 years geochemical and geological experience worldwide both in applied academic research and as a commercial geochemist. She received a Ph.D. from the University of Kiel in Germany following a research stay at GEOMAR Helmholtz Centre for Ocean Research, Kiel. Her research interests focus on using multiple macro- and micro-analytical techniques to investigate the distribution and geochemical behaviour of metals in metallic mineral deposits, with an applied focus on regions where potential deep-sea mining is proposed (see Appendix 1 for WG 42 membership).

8 UKRI GCRF's new 'One Ocean Hub, three members of the working group are part of the Hub, (Ms. Shimmield, Mr. Sweetman and Ms. Currie). This ambitious new Hub brings together partners from the UK, South Africa, Namibia, Ghana, Fiji and Solomon Islands to tackle the crisis facing our oceans. The Hub aims to tackle this by providing more integrated ocean governance, ensuring greater balance between ocean conservation and sustainable use. It has a section deep-sea mining including a research cruise off Africa and development of a decision-making tool. <https://www.strath.ac.uk/research/strathclydecentreenvironmentallawgovernance/oneoceanhub/>

9 Mr. Sweetman is currently involved in new EU funded research, iAtlantic. The new iAtlantic project aims to deliver knowledge that is critical for responsible and sustainable management of Atlantic Ocean resources in an era of unprecedented global change.

**Action requested of GESAMP**

10 GESAMP is invited to consider the information provided and to take action as appropriate.

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**Annex I**

**Membership of WG 42**

Name	Affiliation	Country
Bronwen Currie	Ministry of Fisheries and Marine Resources, Swakopmund	Namibia
Raymond Nepstad	SINTEF	Norway
Cindy Van Dover	Duke University NC	United States
Hannah Grant	BGS	United Kingdom
James Hein	USGS (US Geological Survey)	United States
Stuart Simpson	CSIRO (Commonwealth Scientific and Industrial Research Organization)	Australia
Andrew Sweetman	Heriot Watt University	United Kingdom
Gi Hoon Hong	Korea Institute for Ocean Science and Technology	Republic of Korea
Andreas Thurner	Columbia university	Canada
Tracy Shimmiel	Chair of WG 42	United Kingdom
	ISA (Observer)	Jamaica

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