New IODP 2050 Science Framework **Update**

OBJECTIVES STRATEGIC The new IODP 2050 Science Framework for Scientific Ocean Drilling, entitled "Exploring Earth Through Scientific Ocean" is Habitability and Life on Earth being developed by an internaresearchers Natural Hazards headed by Lead Editors Professor Impacting Society **Anthony Koppers (Oregon State** Understanding natural hazards in the marine University) and Dr Rosalind environment Coggon (University of Southampton). The foundation of the new Global Cycles of Framework is the product of six Energy and Matter international workshops that took place in 2018-2019. More than 650 scientific ocean drilling scientists, representing all IODP Tipping Points in Earth's History member countries and consortia, Contstraining the processes that regulate or destablise participated in these events and the Earth system contributed to the 'Framework Roadmap', which was endorsed by the IODP Forum in September 2019. The mission of the new

The seven Strategic Objectives of the new IODP 2050 Science Framework

floor research, with a focus on improving our understanding of connections between Earth system components. It has been designed to inspire and support strong cross-discipline collaboration and promote dissemination of results to a broad audience.

The new Framework includes seven 'Strategic Objectives' (image above); these are broad, multi-disciplinary research topics that encourage innovation and new discoveries over the next 25+ years. The longer timeframe also allows for inclusion of five flagship initiatives, which are drilling endeavours that will require multiple coordinated expeditions over 10+ years, typically addressing multiple Strategic Objec-

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team

of

Framework is to guide subsea-

tives. Because the Framework covers a longer term than its predecessors, it will be a living online document to encourage and enable the evolution of research objectives. All expeditions will continue to come from bottom-up, proposal driven science.

The editors are very grateful to the community for engaging with the review of the draft document earlier this year, despite the extra workload that people have been subject to due to the coronavirus pandemic and the resulting need to adapt teaching delivery and course content. The review period was extended by two weeks until 31st March to account for this situation. The Science Writing Team received 120 reviews and 94 scientists from 14 countries completed the optional survey. Overall the response was positive and supportive. Over the last two months the science writing team has been updating the document to address the issues that were raised by the reviewers. They are now working with a professional writer and illustrator to prepare a fully formatted version that will be presented to the community for a second round of review later this month, before the final document is prepared for publication. Professor Koppers and Dr Coggon would like to pass on their thanks to everyone who has been involved in writing and editing the document, as well as the community reviewers. The team is very much looking forward to once again receiving your feedback, which they have found to be valuable and constructive so far.



Inforgraphic illustrating the structure and key components of the new IODP 2050 Science Framework