

Virtual Meeting: Mars Sample Return Science in Europe

Friday 20th July, 10:00 - 17:00 (CEST)

1. Introduction

The ESA Mars Sample Return team would like to solicit views from the European science community on priorities and interests related to science exploitation of returned samples.

Updates regarding recent planning and development for a potential Mars Sample Return campaign, with NASA and other potential partners, will be provided together with the latest thinking on possible approaches to sample science management (e.g. curation, distribution, allocation).

The goal is to gather views on several key topics to guide MSR science management planning. Topics may include:

- Overall sample science management: Possible governance models for sample receiving, allocation, distribution and analysis that would satisfy European science community interests and priorities.
- Potential European curation facilities: in particular understanding the need or desire for contained or uncontained sample analysis, including cost/benefit implications.
- Participation of European scientists in MSR preparation, including in NASA Mars 2020 landing site selection.

The input received at this meeting will serve as a basis for ESA to continue discussions with NASA regarding sharing of science benefits from MSR.

2. Agenda (preliminary)

Time	Session	Presentation	Presenter(s) [content provided by]
10:00 – 10:15	Welcome and Introduction	Purpose of Meeting and Expected Output	Elliot Sefton-Nash
10:15 – 10:30	Status of ESA-NASA MSR preparation activities.	Mars Sample Return Benefits and Programmatic Setting	[Stefaan de Mey]
10:30 – 11:00		Overview of MSR Campaign Architecture, ESA Earth Return Orbiter (ERO) and Sample Fetch Rover (SFR) studies	Sanjay Vijendran
11:00 – 11:30		Sample Analogue and Curation Facility (SACF) at ECSAT	Dayl Martin
11:30 – 12:00		Coordinated ESA-NASA activities to scope MSR facility costing. - Summary of ESA activity (F. G.) - Joint community consultation planned for 2019 (E. S-N.)	Francois Gaubert Elliot Sefton-Nash
12:00 – 12:30		Working Group to update planetary protection protocols for MSR.	[Gerhard Kminek]
[LUNCH]			
14:00 – 14:30	MRSH landscape in partnership and planning for	Concepts for possible governance and sample distribution: 1. European contained facility.	Elliot Sefton-Nash

	upcoming proposal and decision points (ESA Ministerial Council 2019).	2. Contributions to US SRF with analytical capabilities.	
14:30 - 16:00	Discussion: Defining European science community position with respect to MSR.	<p>What are the pros and cons for science of a European facility with containment, vs US-based international facility that has European contributions?</p> <p>Is the expected cost of a contained European facility worth it compared to one that receives samples only after sterilisation (potentially years after initial receipt in the US)?</p> <p>Would scientists in Europe be happy to have access to unsterilized samples only as part of an internationalised team on samples in a US-located facility?</p> <p>Following sample release from containment, would European scientists prefer a centralised, Apollo-style distribution (imagine an intl. CAPTEM for MSR), or dedicated sample science management for a subset of samples, curated in Europe?</p>	ALL (with questions to prompt).
16:00 – 16:30	Meeting conclusion. AOB and close.		ALL