

THE 2016 MISSION EXTENSION PROCESS

Briefing to Science Working Teams and User Groups

A.N. Parmar (aparmar@cosmos.esa.int) Head, Scientific Support Office (SCI-S)

MISSION EXTENSIONS



- ➤ In general, this extension round is for **confirmations** of operations for 2017-2018 and **extensions** of operations from 2019-2020 (details next VG).
- So any mission whose approval to operate finishes before the end of 2020 and could have the capability of continued operations will be part of this process.
- Following the recommendations of an SPC Working Group, since 2008 mission extension requests have been grouped and ranked competitively.
- By 2020 will have a number of new missions in operation: Solar Orbiter, BepiColombo, CHEOPS, JSWT and (Euclid) and will have 'lost' Rosetta and LISA Pathfinder.

POTENTIAL MISSION EXTENSIONS



Mission	2017-18	2019-20	SWT/UG etc
HST	Confirmation	Extension	STUC
INTEGRAL	Confirmation	Extension	UG
XMM-NEWTON	Confirmation	Extension	UG
GAIA	N/A	Extension	SWT
CLUSTER	Confirmation	Extension	SWT
MEX	Confirmation	Extension	SWT
SOHO	Confirmation	Extension	SWT
HINODE	Confirmation	Extension	SWG (2 ESA)
PROBA-2	Confirmation	Extension	-
IRIS	Extension	Extension	_

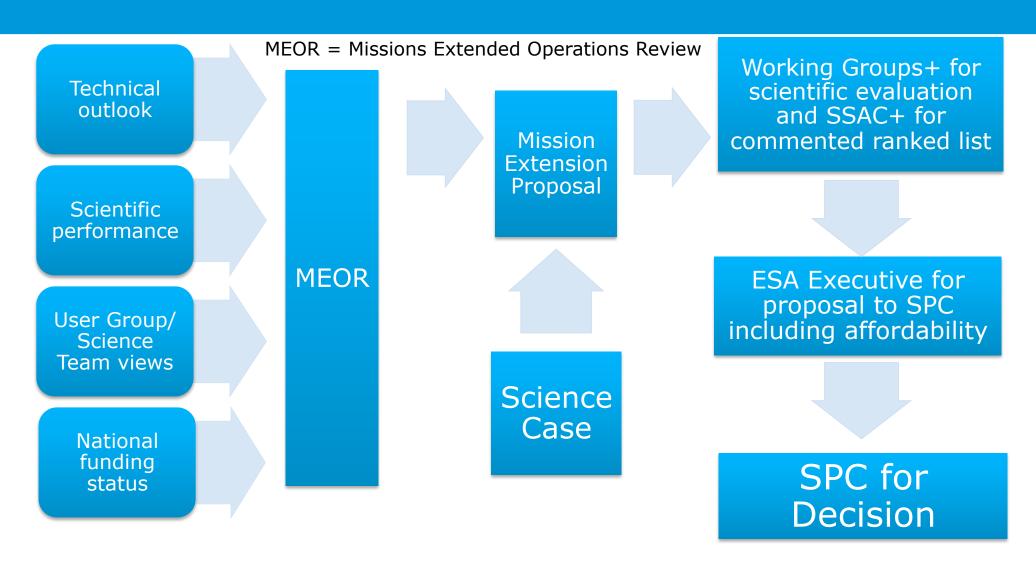
MISSION EXTENSIONS PROCESS



- ➤ The process starts early in the spring of even years and ends with the SPC meeting in November. The missions' User Groups or Science Working Teams play an important role, particularly in the preparation of the science cases.
- The process includes "Mission Extended Operations Reviews" (MEORs), which are ESA internal reviews where all aspects (scientific performance, technical, operational, national funding and disposal) of the mission are assessed.
- ➤ Following a successful conclusion of the MEOR and the agreement of D/SCI, the Executive prepares the case for the extension of each mission.

MISSION EXTENSIONS PROCESS





MISSION EXTENSIONS: CRITERIA



The prime criterion for the decision is defined by the SSAC, but has always been the *added science return* provided by the extension:

- Including expected new science
- Potential for new discoveries
- Possible need for continuity and long time series and
- Impact of the mission so far, assessed by the number and quality of refereed publications etc

EXTENSION PROPOSAL TEMPLATE (1/2)



- Overall responsibility for preparation is with the Mission Managers.
- Contents (maximum 7 pages, excluding annexes):
- Science Case for Extension (Project Scientist coordinates 5 pages)
 - Impact of mission to date, including relevant metrics: completion status of nominal mission, publications, citations, over-subscription factors, usage of archives...
 - Confirmation of operations through demonstration that scientific performance unchanged
 - Expected science in extension
 - Issues of complementarities and uniqueness, including cooperation with (and support to) other missions
 - Recommendations from SWTs/User Groups etc

EXTENSION PROPOSAL TEMPLATE (2/2)



- State of health of spacecraft, instruments, and ground segment including prognosis for extension period and beyond
- Any recommendations from MEOR including any further cost saving measures identified
- Status and prognosis of national funding
- (Outline) financial request
- Conclusions
- Annexes (with any additional info for AWG/SSWG, but not SSAC/ SPC)

2016 EXTENSION TIMELINE



Date	Activity		
Feb-Apr	Contact PIs to identify critical national funding support		
Feb-May	Interact with SWTs/UGs to obtain their inputs		
May-June	Contact national agencies for statements on funding status		
30-31 May	MEORs at ESOC (VCs to ESAC and ESTEC. PIs may observe via VC)		
21-22 Jun	Initial Briefing to SPC, including national funding agencies status		
Apr-July	Preparation of proposals		
End July	Proposals to D/SCI to approve release		
1 Aug	Extension proposals sent to SSAC/WGs		
13-14 Oct	Presentations on the science cases to the SSEWG/AWG (SSAC present) at ESTEC. Talks are 30 min, or 15 min for MoU (TBC). Please nominate a presenter (or max. 2) from the SWT/UG.		
2-3 Nov	SSAC meeting to provide recommendation to D/SCI		
22-23 Nov	Decision by SPC		