

## Human Exploration and Operations Mission Directorate

## Supplemental Budget Status for NASA Advisory Council Human Exploration and Operations Committee

William H. Gerstenmaier Associate Administrator

March 26, 2018



## Human Exploration and Operations

FY 2018 President's Budget Request (PBR) vs. Appropriation

(\$ Million) TOTAL NASA (R&D and CoF) *	FY 2017 Enacted 19,653.3	FY 2018 PBR 19,092.2	Changes from PBR 1,643.9	FY 2018 Approp <b>20,736.1</b>
TOTAL HEO (R&D and CoF)	9,312.0	8,787.4	866.6	9,654.0
TOTAL HEO R&D	9,274.7	8,674.9	866.6	9,541.5
Exploration	4,324.0	3,934.1	855.9	4,790.0
ESD	3,929.0	3,584.1	810.9	4,395.0
Orion	1,350.0	1,186.0	164.1	1,350.0
SLS	2,150.0	1,937.8	212.2	2,150.0
Exploration Upper Stage (EUS)	300.0	-	300.0	300.0
EGS	429.0	460.4	434.6	895.0
2nd Mobile Launch Platform	-	-	350.0	350.0
ERD	395.0	350.0	45.0	395.0
HRP	140.0	140.0		140.0
AES	255.0	210.0	45.0	255.0
Space Ops	4,950.7	4,740.8	10.7	4,751.5
Overall Reduction			(39.3)	
International Space Station (ISS)	1,450.9	1,490.6	-	
Space Transportation	2,589.0	2,415.1	-	
Space and Flight Support (SFS)	910.8	835.0	50.0	
21st Century Space Launch Complex	20.0	-	20.0	
Tech for small payloads launch vehicles **			30.0	
TOTAL HEO CoF	37.3	112.5		112.5
Exploration CoF	8.8	95.9	-	95.9
Space Ops CoF	28.5	16.6		16.6

\* Agency total does not include emergency supplemental funds

\*\* Senate recommended funding level



- Use SLS as the launch vehicle for the Europa mission, NLT 2022
- SLS shall have a lift capability not less than 130 mt; shall develop core elements and an exploration upper stage simultaneously (EUS \$300M)
- EGS received an additional \$350M for launch capabilities and infrastructure associated with constructing a 2<sup>nd</sup> mobile launch platform
  - > Bill language: ".....including \$350M for a second mobile launch platform and associated SLS activities"
- May use incremental funding for Orion, SLS and EGS acquisitions in FY 2018 and thereafter
- Establish a habitat development program office at a center
- Continue activities to advance technologies for launch vehicles of small payloads to increase opportunities for improved access to suborbital and orbital launch opportunities once the current round is completed (i.e. Venture Class Launch Services \$30M)
- Maintain 21<sup>st</sup> Century Space Launch Complex at FY 2017 levels (\$20M)