

Twentieth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-20)

SEU (Space Environment Utilization) WG Activities

Proposed Outline

1. The scope/objectives of SEU WG activities

The SEU WG started its activity in 2005 as an Asian gateway to the International Space Station (ISS). The participating agencies have developed their capacity to use the unique environment efficiently through ground based preparatory activities such as feasibility studies and parabolic flights to date. The time is ripe for the real operation of Asian experiments in Kibo which has been fully operational since 2009.

A series of protein crystallization experiments by Malaysia (ANGKASA) and Japan (JAXA) in Kibo has obtained good results and the next series is expected to follow. A joint conceptual study between Korea (KARI) and Japan (JAXA) for biomedical studies is in good progress. It is urgently necessary, however, for starting up new innovative programs to make full use of the capability of Kibo.

Advantages of low earth orbit other than the microgravity, such as a wide field of view are also the merit of Kibo utilization. Deployment of small satellites from Kibo is another good example. This WG will elaborate to create novel type of utilization projects to meet the unique needs by the Asia-Pacific region by systematically coordinating with other space systems.

2. The Results of SEU WG Activities at APRSAF-19

See the attached APRSAF-19 adopted recommendations.

3. The Draft of the Agenda

- (1) Opening of the session
- (2) Review of the last SEU WG at the APRSAF-19
- (3) Kibo utilization status updates

Appendix C

- (4) JAXA Astronauts Medical Dr. Satoshi Fukukawa presents for Space medicine program and exchange views etc.
- (5) Status report on SEU programs
 - a. Protein Crystal Growth
 - b. Cell and plant biology experiments
 - c. Student's parabolic flight contest
- (6) Launching new programs
- (7) Other

2013/12/2	Day0	Kibo-ABC Workshop	at VAST campus
2013/12/3	Day1	Sprinter session (SEU WG)	
2013/12/4	Day1	Sprinter session (SEU WG)	
2013/12/5	Day3	Plenary Session	
2013/12/6	Day4	Plenary Session	Summary from each WG

APRSAF-20 Draft Agenda for Space Environment Utilization Working Group

Working Group Session

Day 1			
day	time	No.	Presenter
Dec.3rd	9:00-9:10	1	Opening remarks by Co-chairs
	9:10-9:25	2	Review of the last SEU WG at the APRSAF-19
	9:25-9:55	3	Report from Host country
	9:55-10:25	4	Kibo Utilization status and cooperation activities with Asia-Pacific countries
	10:30 - 10:45		Short Break
	10:45-11:15	5	Report from Indonesia
	11:15 - 11:45	6	2013 SEU activities at NSTDA
	11:45 - 12:15	7	Microgravity Programme in Malaysia 2013 through APRSAF
			Reserve (Time for time management)
	12:30 -13:30		Lunch Break
	13:30-14:30	8	Space medicine program and exchange views
	14:30-15:00	9	KIBO HiVision EarthView Educational System Operation
	15:00-15:30	10	Reports from Singapore
	15:30-15:45		Short Break
15:45-16:15	11	Report from Korea	
16:15 - 17:00	12	Future plan	

Working Group Session

Day 2			
day	time	No.	Presenter
Dec.4th	9:00-9:30	13	Review of Day 1, Agenda modification,
	9:30 -10:00	14	An Update on Space Activities in Australia
	10:00 - 10:30	15	A New Approach for Planning and Environmental Policies in Regional Development: As a Case Study Southeastern Anatolia Project (GAP) in Turkey
	10:30 - 10:45		Short Break
	10:45-11:15	16	Phototaxi of Chlamydomonas reinhardtii
	11:15 - 11:45	17	PF report
	11:45 - 12:05	18	Proposal for next step
	12:05-12:30	19	Draft recommendations and Action item review
	12:30-13:30		Lunch Break
	13:30-15:30	20	Discussion about the summary of the meeting
	15:30-15:45		Short Break
15:45-17:00	21	Confirm summary, recommendation and actions	

Plenary Session

Day 3			
day	time	No.	Presenter
Dec.5th	9:00-12:30		Country Report
			Lunch Break
	15:45-16:15		Special Event
	16:15-17:15		Reports on Initiatives(Sentinel Asia, SAFE, Climate and Kibo-ABC)
			Kibo-ABC
			Report by APRSAF Related Projects

Day 4			
day	time	No.	Presenter
Dec.6th	9:00-10:00		Remarks by International Organizations
	10:00-10:05		Summary Report by ExCom(APRSAF Executive Committee)
	10:05-10:45		Summary Reports by Working Groups
			SEUWG
			Lunch Break
			Cultural Tour