



**Mission Idea Contest**  
for Micro/Nano-satellite Utilization

## Overview

Pre-Workshop for the 5<sup>th</sup> Mission Idea Contest  
for Micro/Nano Satellite Utilization

**Dec 2, 2017**

**Rainer Sandau, IAA**

**Chair of the Review Team**

# Background

- Mission Idea Contest was launched in 2010 to encourage innovative exploitation of micro/nano-satellites to provide useful capabilities, services.
- It provides aerospace engineers, college students, consultants, and anybody interested in space with opportunities to present their creative ideas and gain international attention.



MIC2 final presentation, Oct. 10, 2012, Nagoya, Japan



MIC3 finalists and reviewers, Nov 19, 2014, Kitakyushu, Japan

# PreMIC5 Overview

- **Objective:** encourage innovative exploitation of micro/nano satellites to provide useful capabilities, services or data
- **Eligibility:** Any individual, group or company with suitable space systems expertise and an enthusiasm for nano-satellites
- **One Category :** Mission Idea and Satellite Design
- **Target satellite(s):** satellite(s) weighing less than 50 kg
- **Local Competitions:** Japan, Germany, USA, Mexico, Italy
- **Important dates:**
  - May 31, 2017 : Abstract (5 pages max) Due **EXTENDED**
  - June 19, 2017 : Notification of acceptance
  - July 22, 2017 : Final presentation in Kitakyushu, Japan
  - Dec 2, 2017 : Winners can make presentation at PreMIC5 Workshop in UNISEC-Global Meeting, Rome, Italy

<http://www.spacemic.net>

# Comparison of the past MIC and Pre-MIC

	MIC1	MIC2	PreMIC 3	MIC3	PreMIC4	MIC4	PreMIC 5
Satellite mass	< 15 kg	<50 kg	<50 kg	<50 kg	<50 kg	<50 kg	<50 kg
Number of satellites	2 or more (constellations only)	1 or more	1 or more	1 or more	1 or more	1 or more	1 or more
Category	1 Mission idea for nano-satellite constellation	2 Mission idea and satellite design  Mission idea and business model	2 User  Developer	1 Mission idea and satellite design	2 Mission proposer  Resource provider	1 Mission idea and satellite design	1 Mission idea and satellite design (SDGs requirement)

# New Requirement for PreMIC5

Your proposal needs to satisfy any of the frameworks.



<https://sustainabledevelopment.un.org/sdgs>

# Review and Award

- Review team:
  - Rainer Sandau, IAA
  - Shinichi Nakasuka, University of Tokyo
  - Herman Steyn, Stellenbosch University
  - Rustem Aslan, Istanbul Technical University
- Award: The best team will be seeded in the 5<sup>th</sup> Mission Idea Contest for Micro/Nano Satellite Utilization.