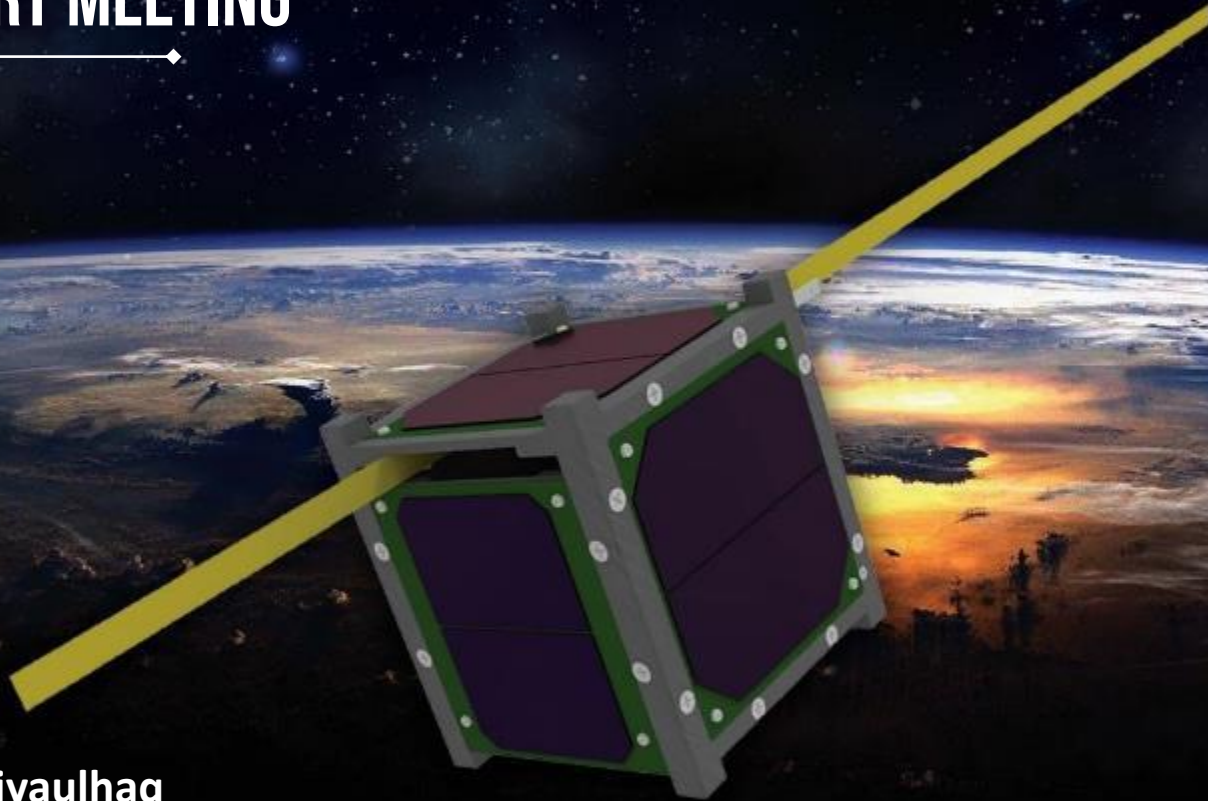


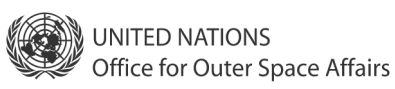
SURYA SATELLITE - 1

UNOOSA EXPERT MEETING

May 16th, 2023



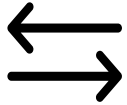
Presented by Zulfa Dhiyaulhaq
muhammad.dhiyaulhaq@student.surya.ac.id



Outline



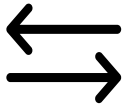
OUR **STORY**



EARLY OPERATION STATUS



GROUND STATION DEVELOPMENT



GIVE IMPACT TO **COMMUNITY**



Project timeline

2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023



CRIM, Tangerang



PUSTEKSAT LAPAN, Bogor



Mock-up model



APRSAF 2016, Manila

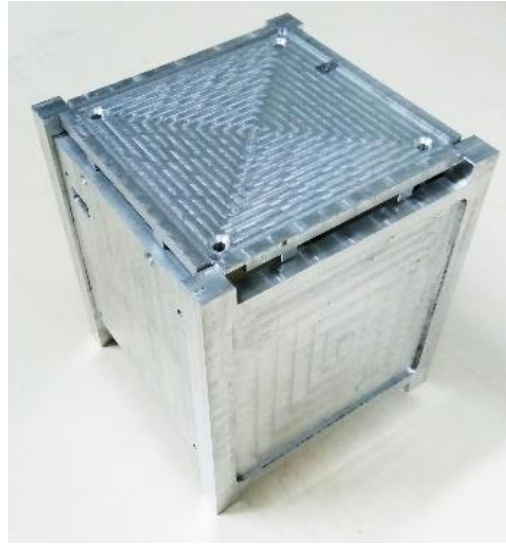
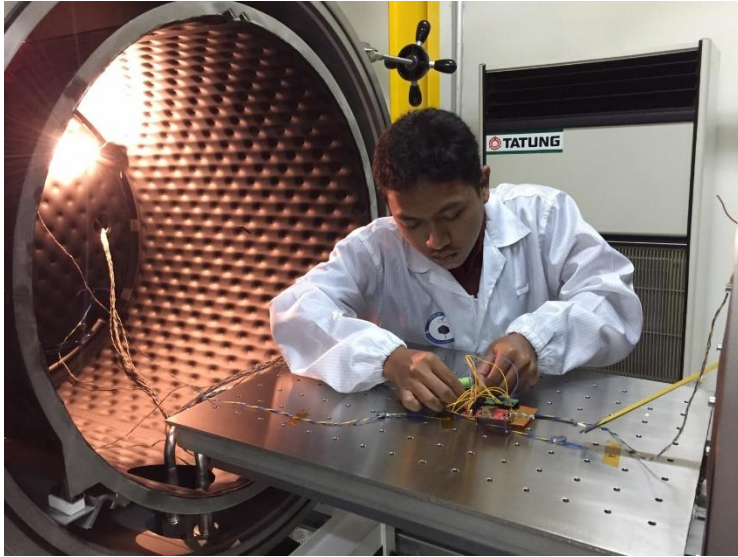


Kemkominfo, Jakarta

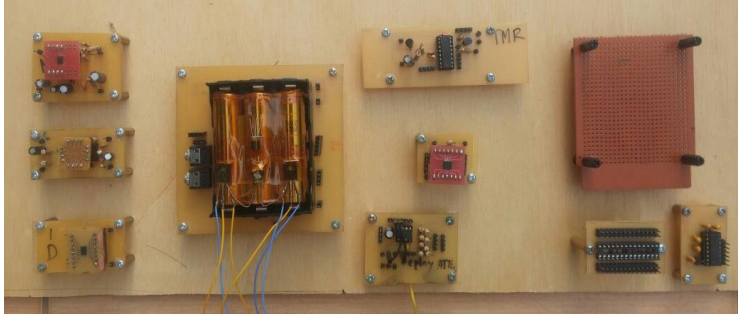
- Radio communication workshop with Amateur Radio Organization
- Visit to Space Agency
- Start Nanosatellite R&D: Mock-up model
- First time knowing KiboCube on APRSAF 2016, Manila
- Audiensi dengan Ministry of Communication and Informatics

Project timeline

2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023



- Sub-system development
- Pre-engineering model structure manufacturing
- LISAT Conference 2017
- Signing MOU with partners



MOU dengan PSN



Project timeline

2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023

[About JAXA](#) [Missions](#) [Global Activities](#) [Topics in Your Area](#)

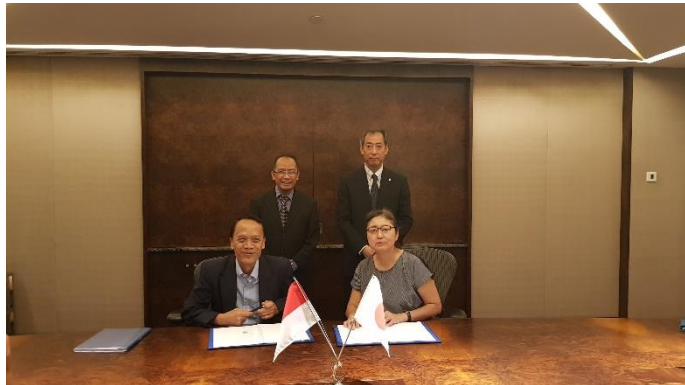
Press Release

[Home](#) > [Press Release](#) > KiboCUBE: Team from Indonesia Selected as Second Entity for Third Round

[Tweet](#)

KiboCUBE: Team from Indonesia Selected as Second Entity for Third Round

September 18, 2018 (JST)



APRSF 2018, Singapura



IAC 2018, Bremen

- MOU Signing with Space Agency (LAPAN)
- Amateur Radio Filing and Coordination (IARU)
- Selected as an KiboCube Awardee on IAC 2018, Bremen, Germany
- MOU Signing and Kick Off Meeting with JAXA (APRSF 2018, SG)



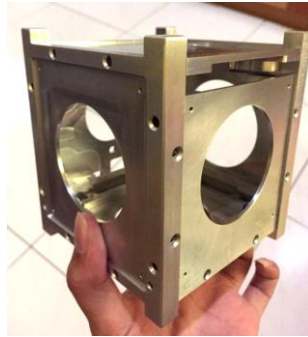
MOU dengan LAPAN

Project timeline

2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023

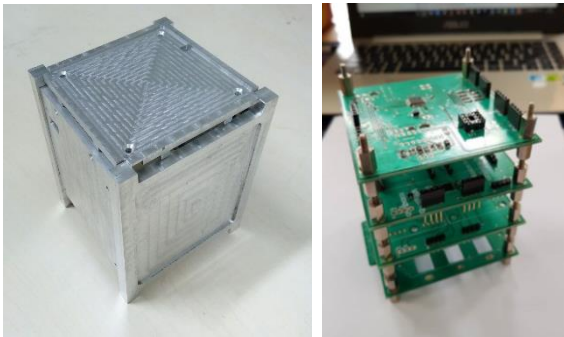


PUDAK Scientific, Bandung

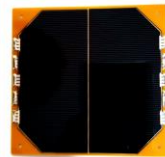
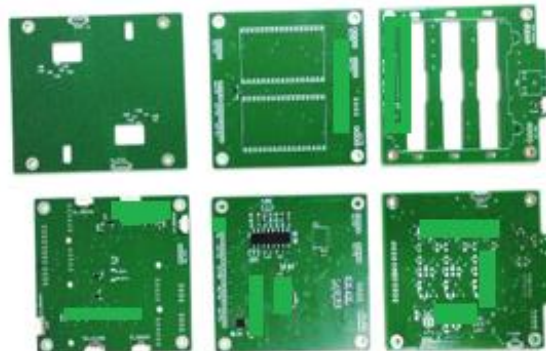


2019

- Electronics Procurement
- Solar Panel procurement
- Engineering model development



Pre-engineering Model



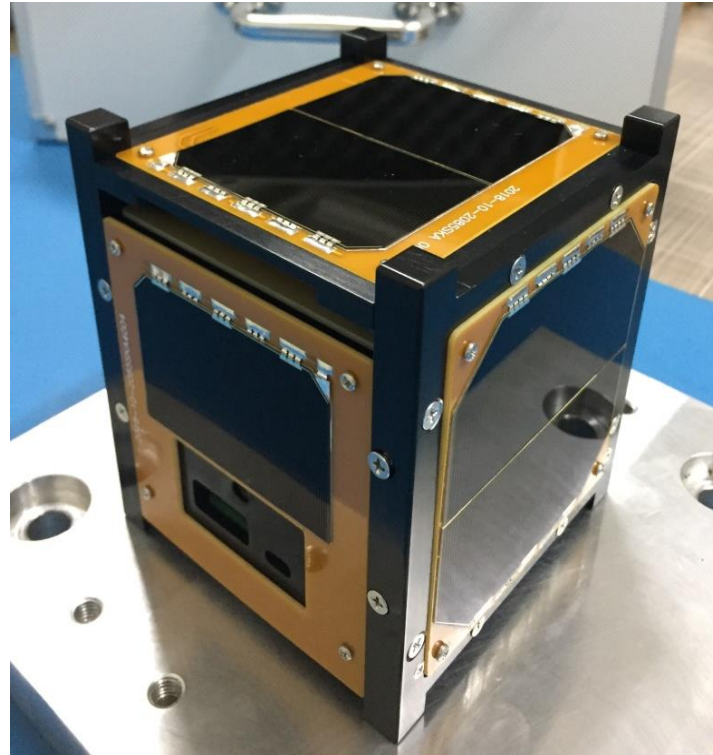
2020

- Finalizing Phase 012 Review from JAXA
- Engineering Model Assembly



Project timeline

2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023



Pusteksat LAPAN, Bogor

2021

- Safety Review Phase 3 peluncuran
- Flight Model Assembly, Integration, and Testing

2022

- Satellite Finalization
- Shipment to Tsukuba Space Center
- Final check dengan JAXA



Project timeline

2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023





Regulatory Status

ID number (SNS)	adm	ORG or Geo.area	Satellite name	Earth station	long_nom	Date of receipt	ssn_ref	ssn_no	ssn rev/ Sup	ssn rev no	removal	Part/ Art.	WIC/IFIC (ifc.mdb)	WIC/IFIC date
up down	up down	up down	up down	up down	up down	up down	up down	up down					up down	
118545187	INS		NUSANTARA-SS1-A		N-GSO	28.09.2018	API/A	12205					2885	11.12.2018
118545187	INS		NUSANTARA-SS1-A		N-GSO	28.09.2018	API/B	1061					2896	28.05.2019
122500124	INS		NUSANTARA-SS1-A		N-GSO	09.08.2022	PART I-S						2982	18.10.2022
122500124	INS		NUSANTARA-SS1-A		N-GSO	09.08.2022	PART II-S						2987	10.01.2023

Progress:

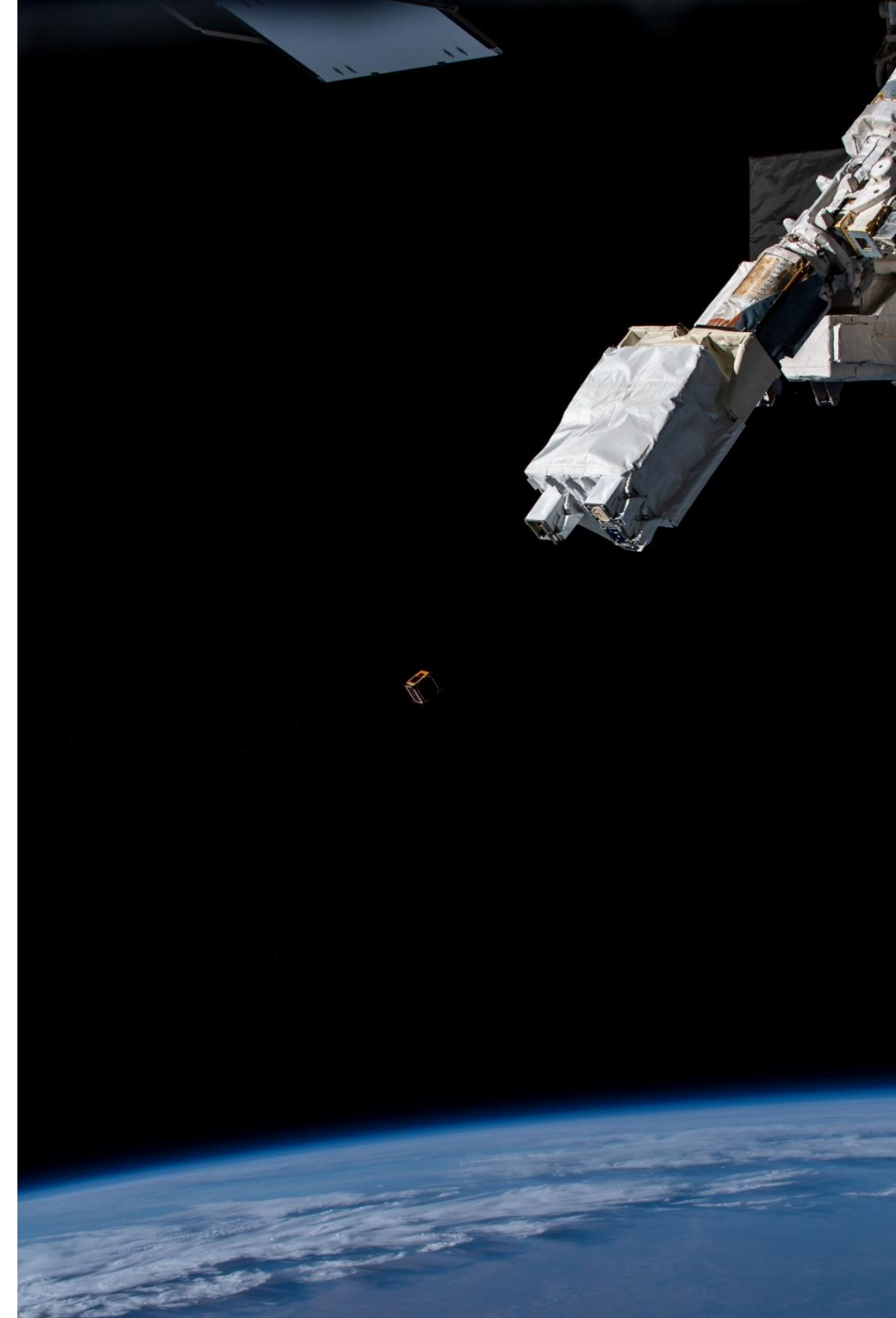
- Part II-S has been released → Coordination through ITU has been completed
- Annual report meeting to Kemkominfo held on 17 March 2023
 - Agenda include delivering satellite operational and regulatory status





Launch and Deployment

- Deployment Event successfully held on 6 Jan 2023

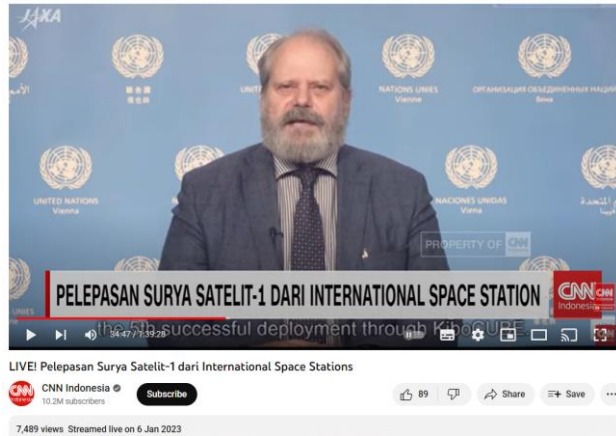




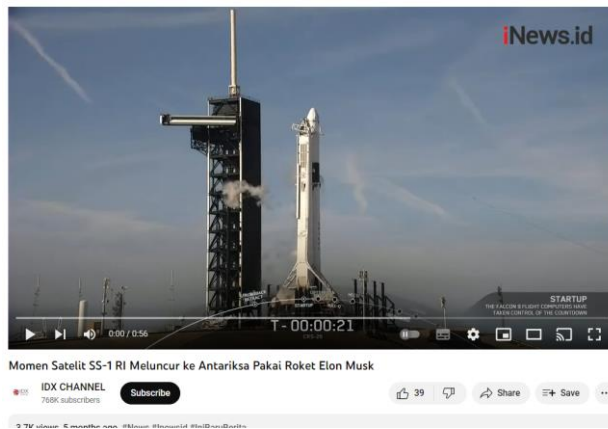
Deployment



Exposure and Engagement



Launch and Deployment Event
from mainstream media
> 1,000,000 views
> 2300 comments





Ground Station

Status Update

- Ground Station is operational
- Nanosat pass Cikarang 3-4 times a day
- Satellite has been registered for space object tracking
- GS operation SOP has been created



Nanosat Workstation setup

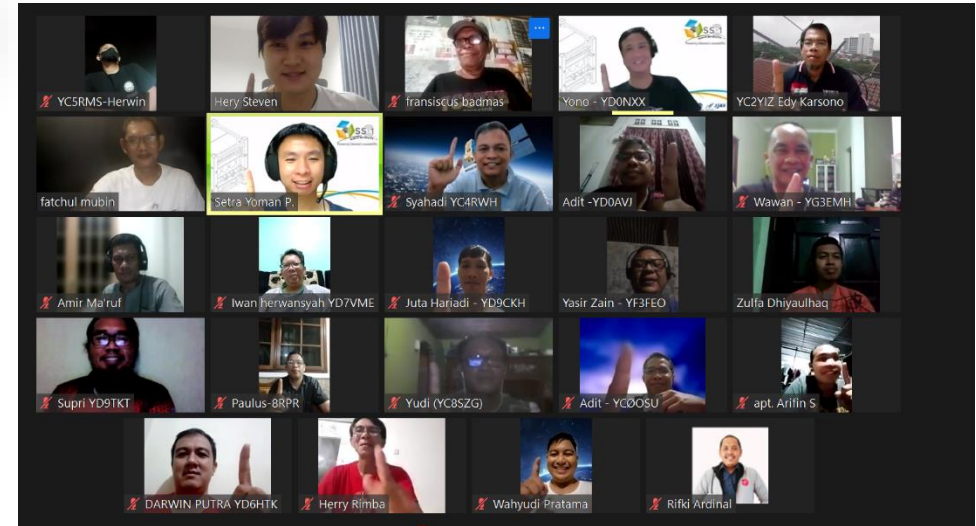




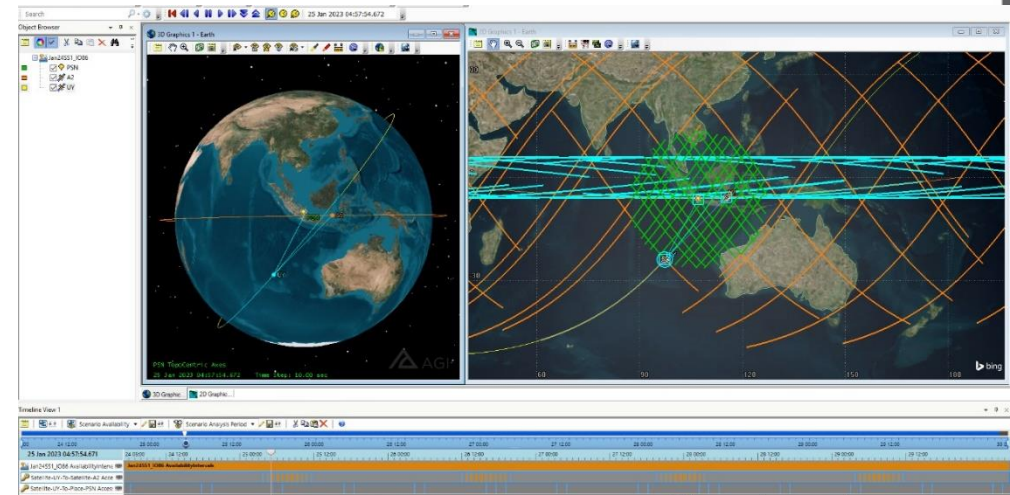
Early Operation Status

Progress:

- Collected SS-1 Data from GS and various sources
- Has coordinated with AMSAT-ID on 8 Jan 2023 about satellite condition and tracking
- Command has sent to SS-1 to save some energy due to some anomaly
- To track SS-1 via LAPAN-A2 repeater due to weak signal. Has coordinated with Pusteksat & AMSAT-ID



SS-1 & AMSAT-ID EOP



SS-1 Tracker Scheduling

↔ Give to Community and Younger Gen

- Webinar Microcontroller Subsystem for NanoSatellite held on 20 March 2023
- In collaboration with IEEE and Politeknik Ujung Pandang
- Lesson learned from SS-1 project
- almost 50 participant



THANK YOU

