

# Status of Korean SBAS Program

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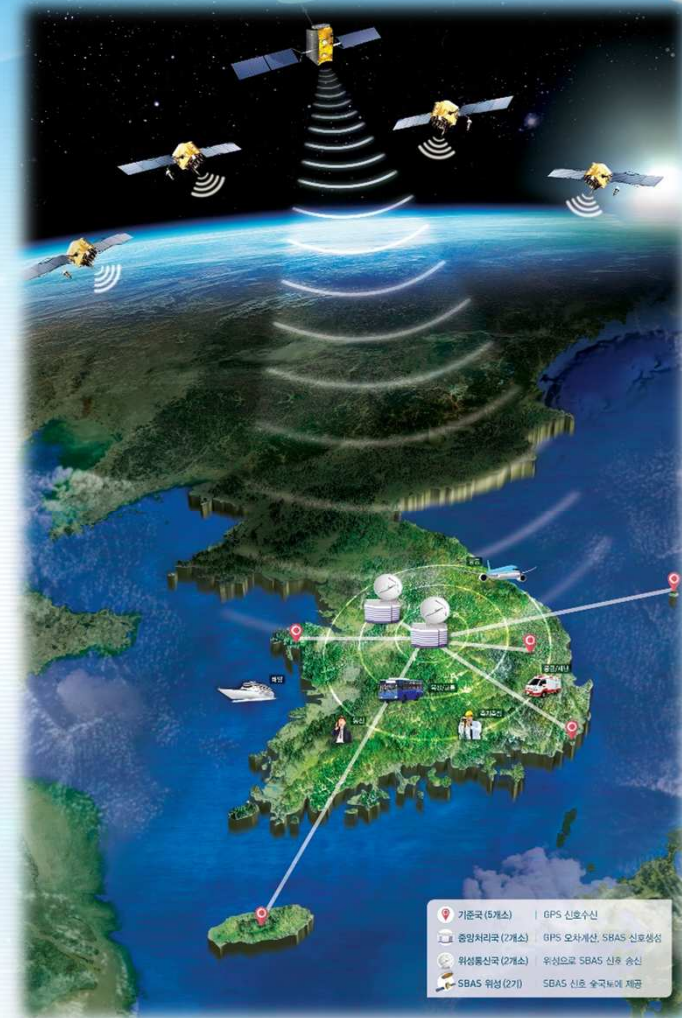
# The Name of Korean SBAS



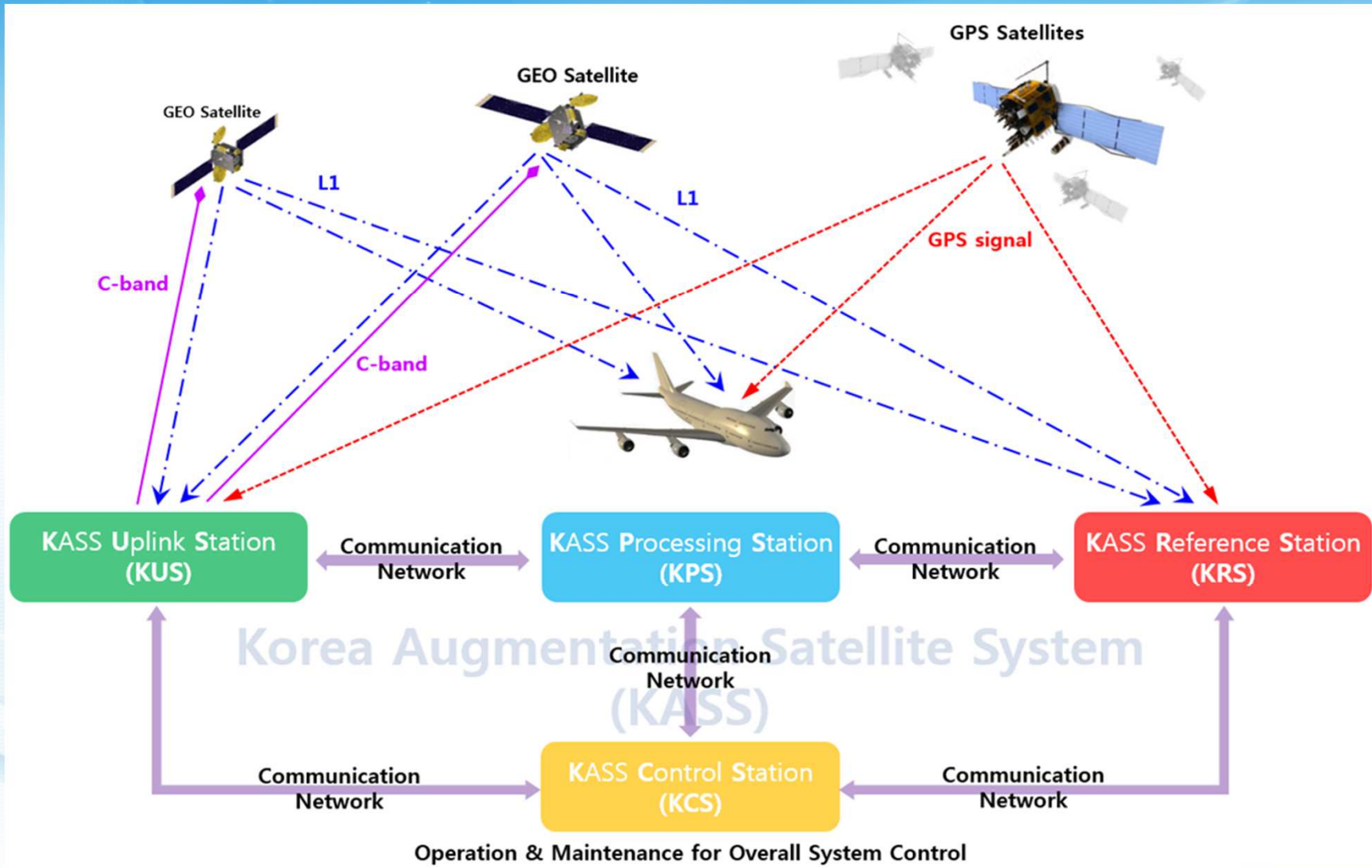
**KASS :**

Abbreviation of

**"Korea Augmentation Satellite System"**



# KASS Sub-System Name



# History of KASS Program



2013.08

Government decided to launch the Korean SBAS (K-SBAS) Program

2013.12

Preliminary Study on K-SBAS (2013.12 ~ 2014.06)

- 2014.06 : The result of study was reported to Korean Government
- 2014.09 : RFP for selecting K-SBAS Program Office was announced

2014.10

KARI was awarded as K-SBAS Program Office

2014.12

K-SBAS Program was officially kicked off.

2015.05 & 07

Mission Requirements Review & System Requirements Review.

2015.09

Tender Notice for Contractor.

2016.10

Contractor was selected.

# Outline of KASS Program



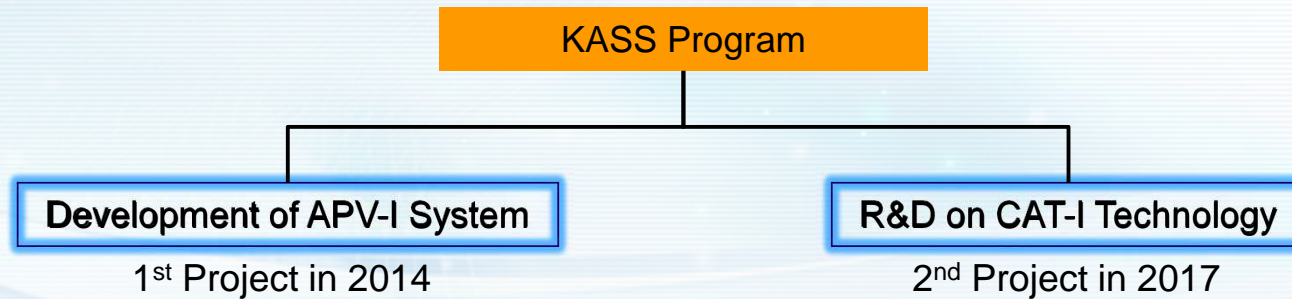
Goal  
**Development of SBAS which meets ICAO Standard**

## 2 Main Project

- 1** KASS development for APV-I SoL service (2014~)
- 2** R&D for CAT-I Technology (2017~)

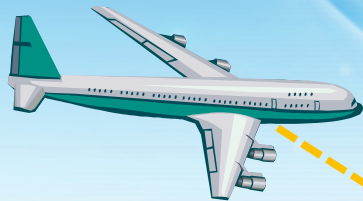
Period 2014 ~ 2022 (8 years, 3 phases)

- 1<sup>st</sup> Phase (Oct. 2014 ~ Feb. 2017) : System Design
- 2<sup>nd</sup> Phase (Mar. 2017 ~ Feb. 2019) : Implement, Integrate and Evaluate
- 3<sup>rd</sup> Phase (Mar. 2019 ~ Oct. 2022) : Preliminary Operation, Open Service, SoL Preparation



※ APV : Approach Procedure with Vertical Guidance, CAT : Category, SoL : Safety of Life, OS : Open Service

# Performance Goal of KASS Program



- **1<sup>st</sup> Project : KASS development for APV-I SoL service**

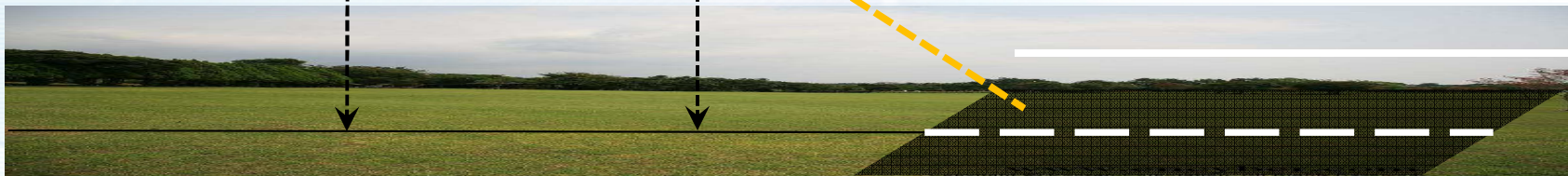
**APV-I**

{ Provide APV-I SoL Service in the Korean Peninsula area  
Meet ICAO Standard (Annex 10)

- **2<sup>nd</sup> Project : R&D for CAT-I Technology**

**CAT-I**

{ Research CAT-I Technology  
Multi Frequency and Multi Constellation



# KASS APV-I System Architecture



KASS Processing Station



KASS Control Station



KASS Uplink Station



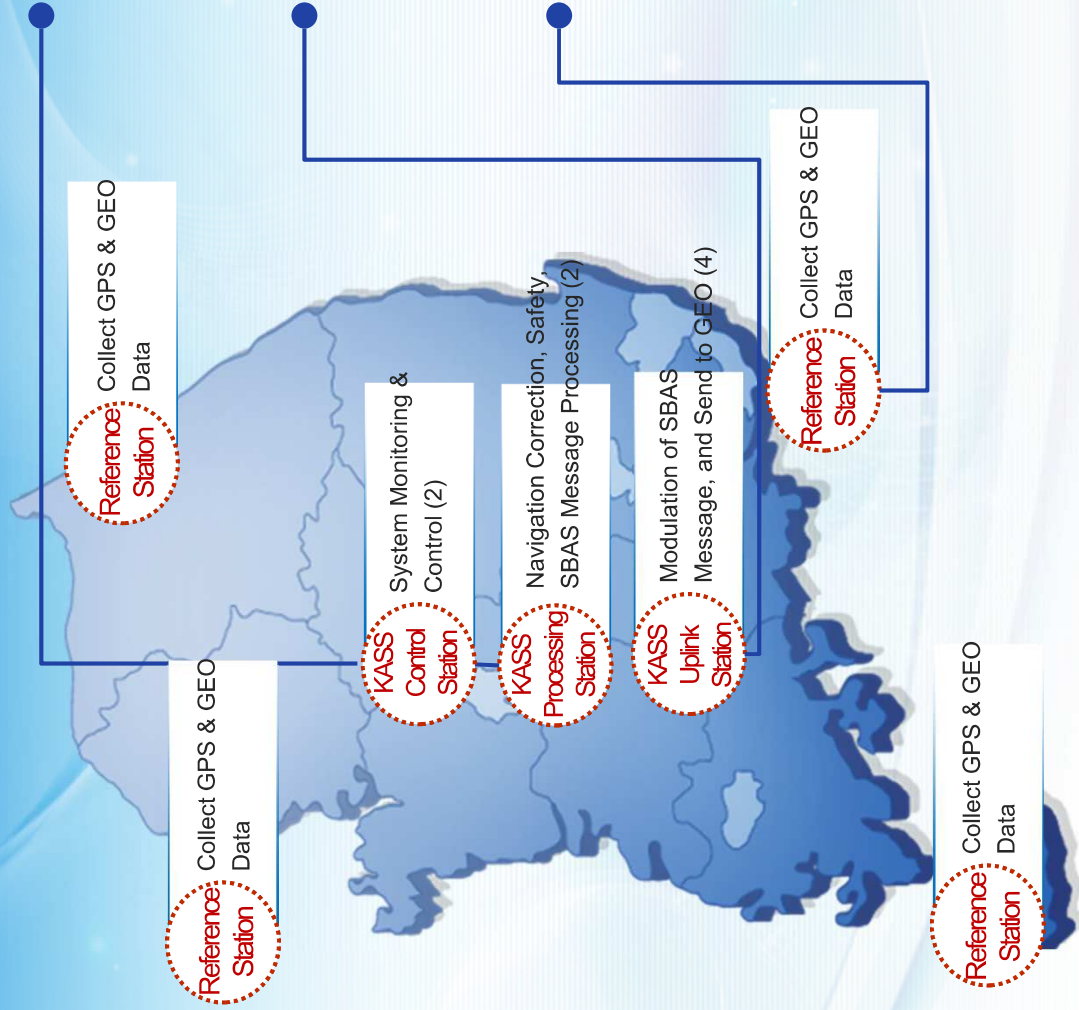
KASS Reference Station



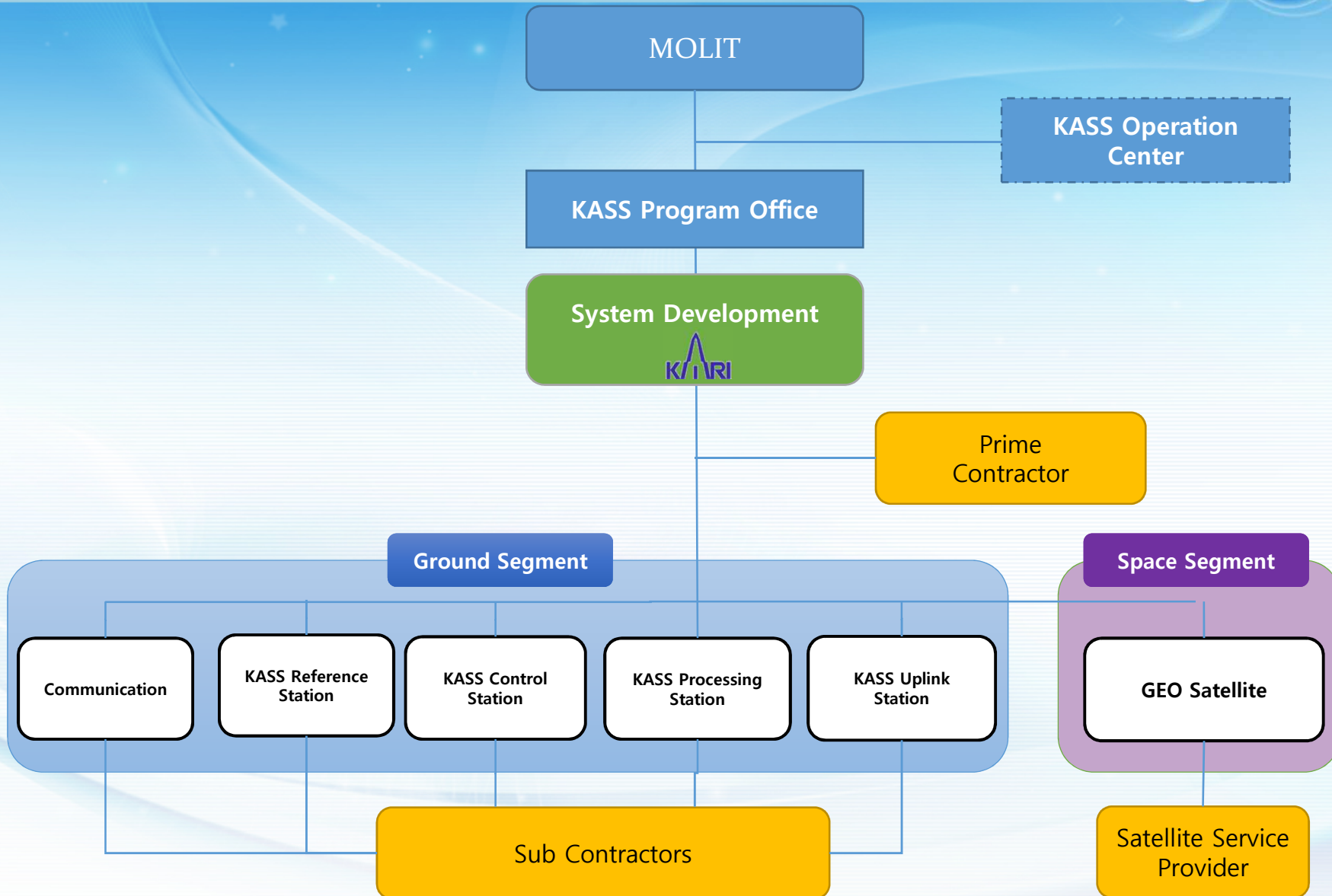
KASS Reference Station



GEO Satellite



# KASS Program Organization Structure







# Near Term Plan of KASS Development



## International Collaboration

Negotiation details with Prime Contractor

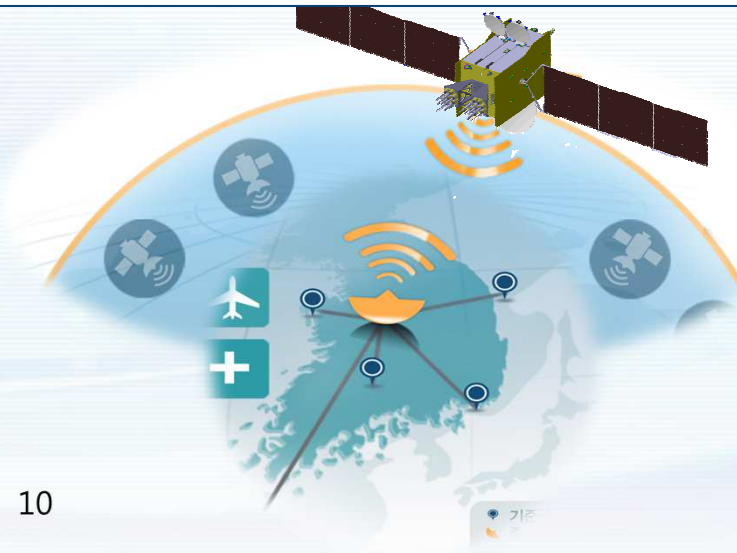
## System Design Phase

SDR

Design Top-level System & Prepare the Detailed Plan

PDR

Finalize System-level Design and Specification of Sub-system



# Thank You!

