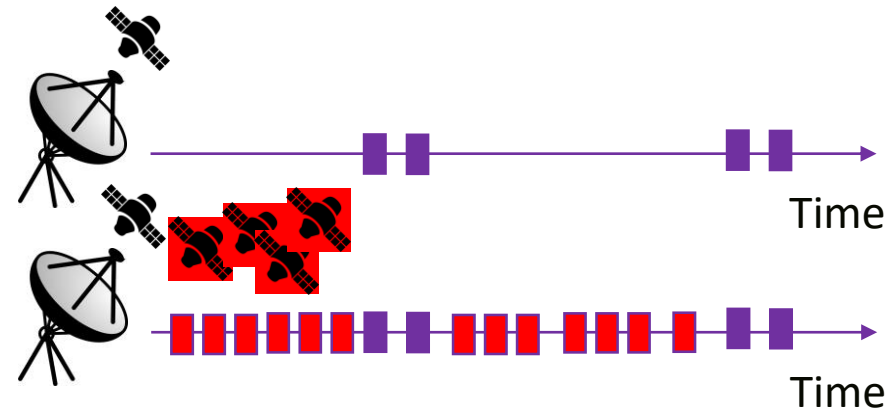22nd October, 2016
Group Discussion Session

Group 5:
Collaborators meeting for new ground station network experiment
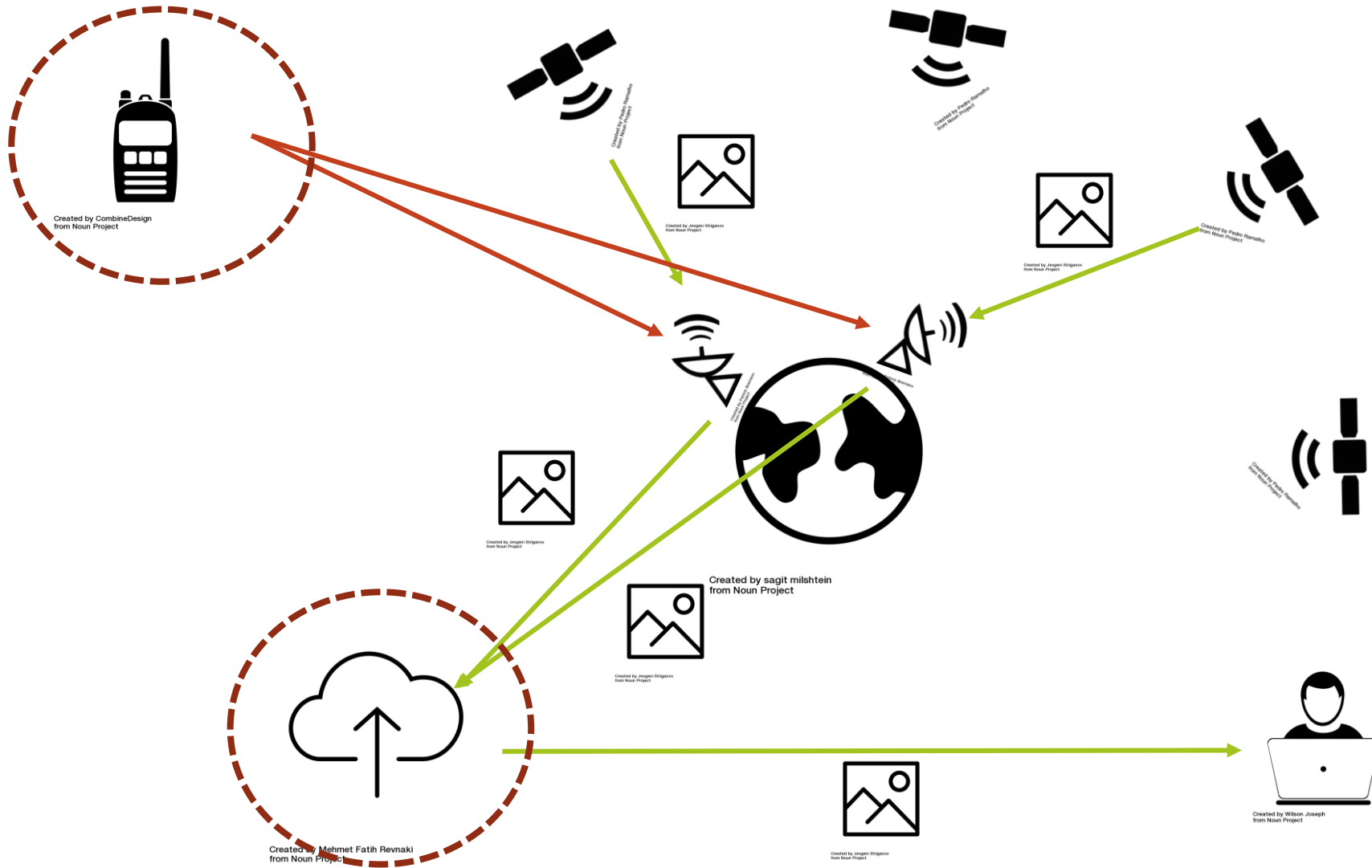
Satellite Operation Platform for Constellation

- Need ground station network as infrastructure, such as the Internet.

- How to create? ⟹ Apply "Sharing Economy" concept
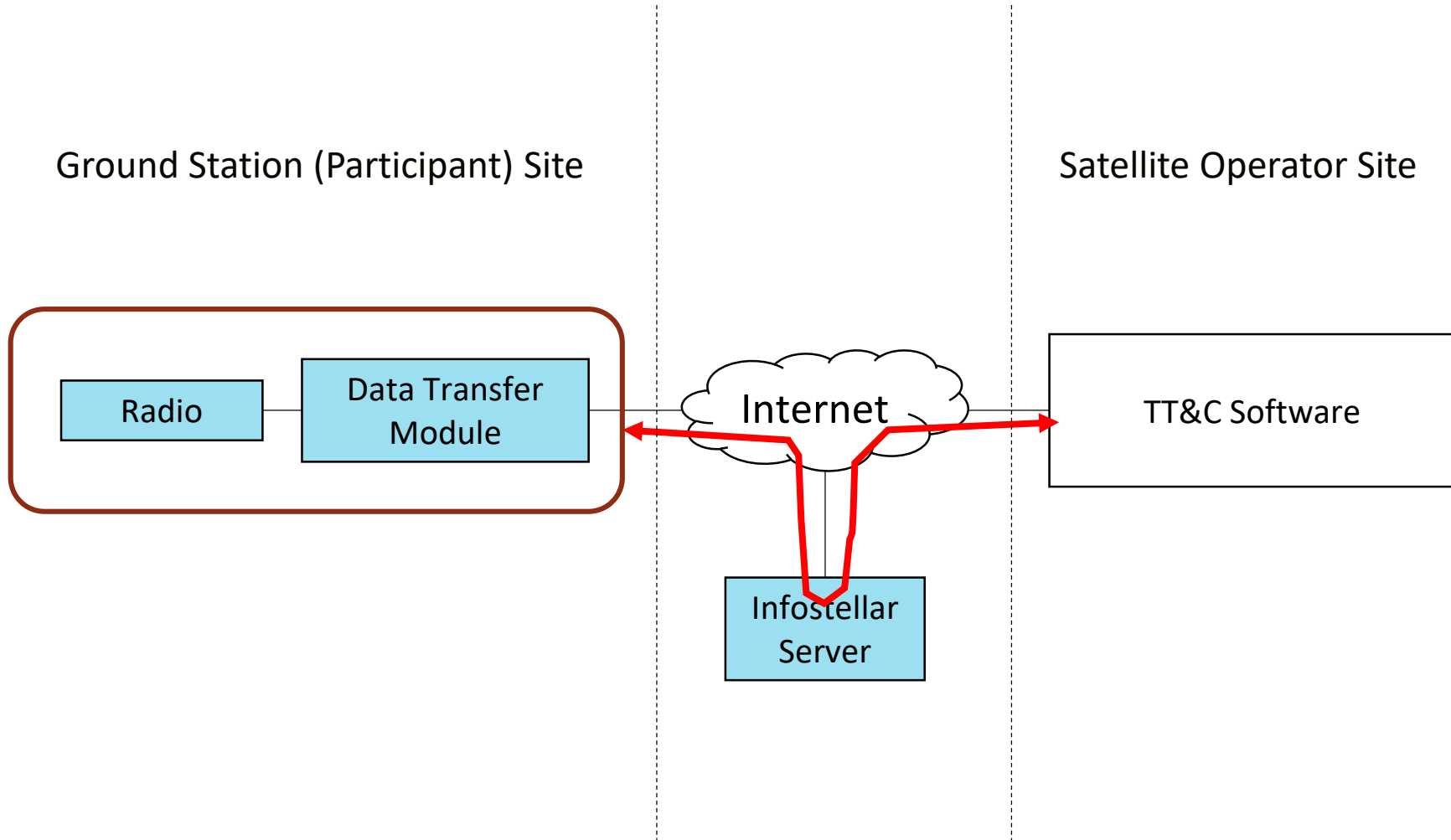

Time

Time

- How to be a sustainable network?

⟹ Charge for private business. (Running cost)

⟹ Return free/cheap pass usage for contributor, who share their antenna's idling time. (Network growth)

StellarStation

Provide connections between antenna-cround server-satellite operator

StellarStation

Ground Station (Participant) Site

Satellite Operator Site

Radio

Data Transfer Module

Internet

Infostellar Server

TT&C Software

*Infostellar provides modules indicated in blue boxes

Cloud Radio

- To correspond variety of satellite communication protocol, modulation/demodulation and coding/decoding process is done in cloud server.
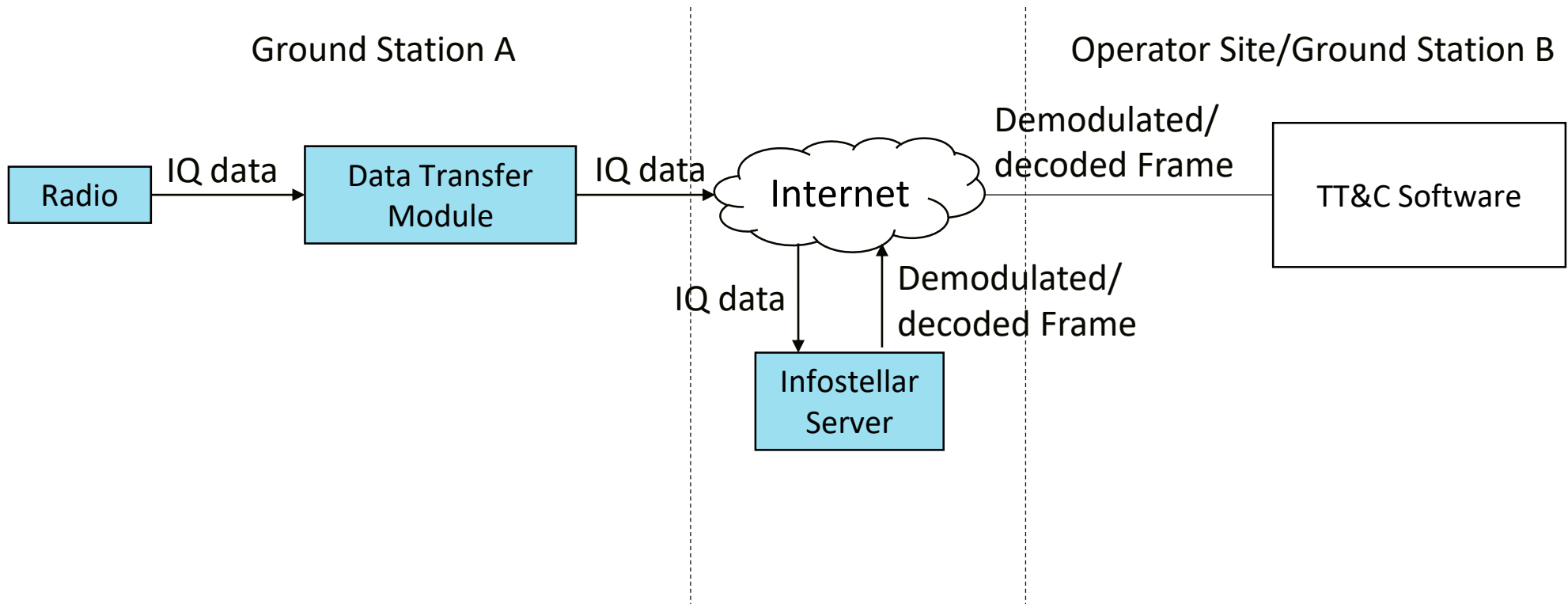
Experiment Plan

	Project	Schedule	Leader	GS	Spec
1st	BIRDS	2016. Nov.-Dec. Installation 2017. Feb. – Operation	Kyushu Institute of Technology, Japan. Prof. Cho	Japan, Taiwan, Thailand, Ghana	Downlink: 430 MHz (Amateur) Uplink: 140 MHz
2nd		2017. Mar.-Apr. Installation 2017. Jun. – Operation		+ 5 GS	

- Share information

  - Ground station specification and activities

  - Frequency coordination and radio law situation in each country

  - 1st experiment introduction

- Discuss next ground station network experiment

Thank you

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Agenda

- Self-Introduction and information sharing

- Brain Storming

  - Ground station network use case

  - Issues