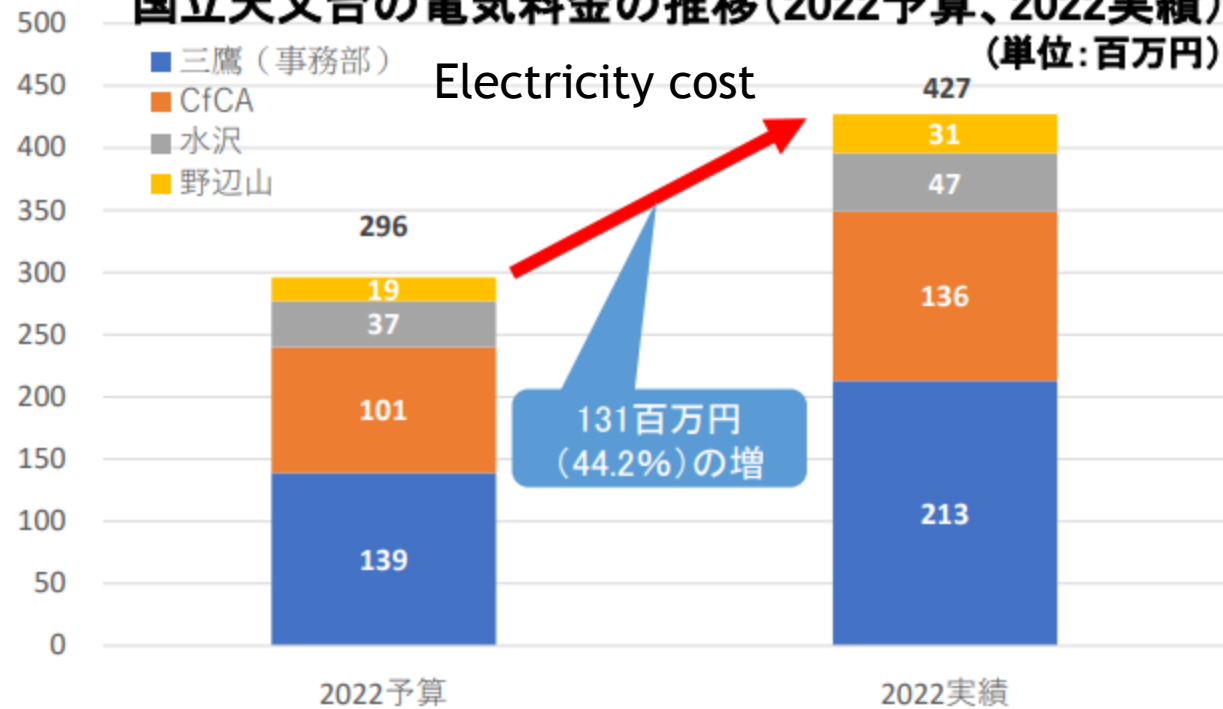


Discussions

Financial Status of NAOJ Revisited (Saito => Motohara)

- ▶ Operation Expenses Grant (運営費交付金) is gradually decreasing.
- ▶ NAOJ need to take measures for this as done in the 3rd mid-term, by
 - ▶ Regain the operation expenses grant through organization reformation, etc.
 - ▶ External funding (not only Kakenhi, but other resources by advertising our technology; i.e. Moonshot
 - ▶ Get high reputation from government
 - ▶ Donation
 - ▶ etc.

国立天文台の電気料金の推移(2022予算、2022実績)



We Suffer from high electricity cost in FY2022 and FY2023

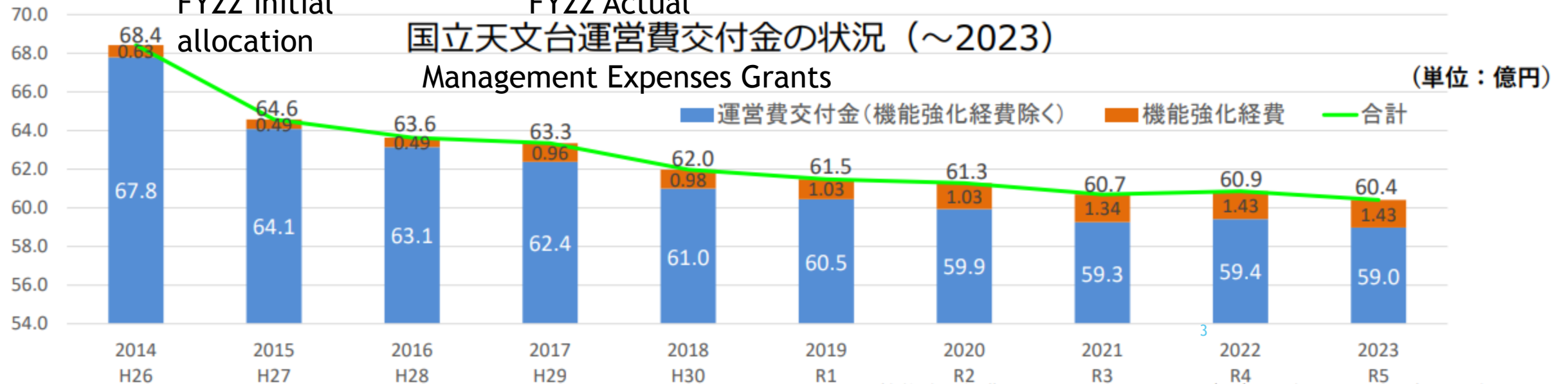
During the 4th Mid-Term Plan period (FY 2022-27), operation expenses grants will be subject to a mission realization acceleration factor of 1% per year (equivalent to a reduction of approximately 60 million yen per year). **FY 2027 is thus expected to be 290 million yen less than FY 2022**

FY22 initial allocation

FY22 Actual

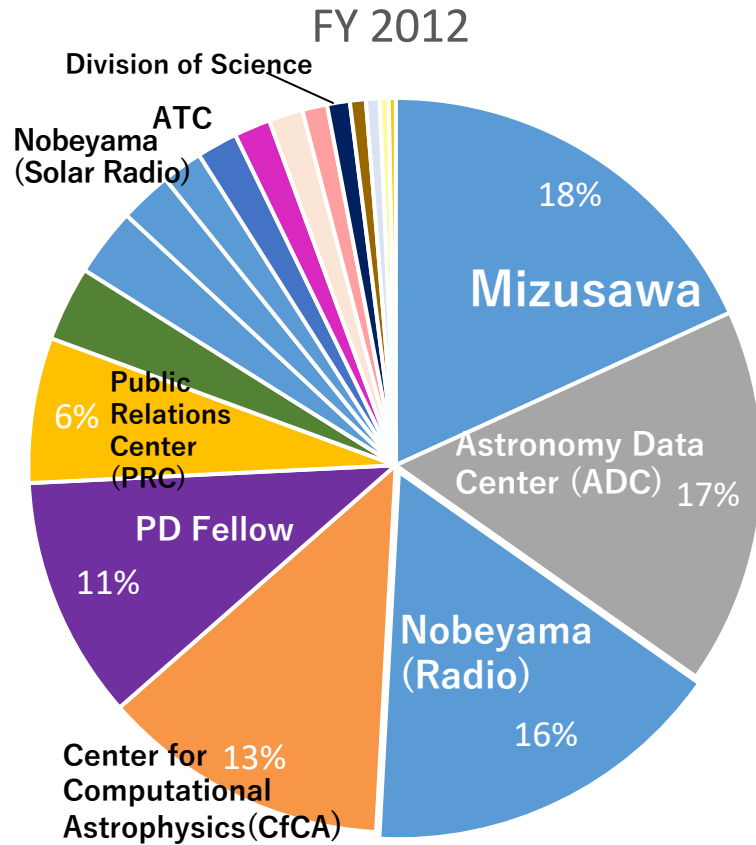
国立天文台運営費交付金の状況 (~2023)

Management Expenses Grants



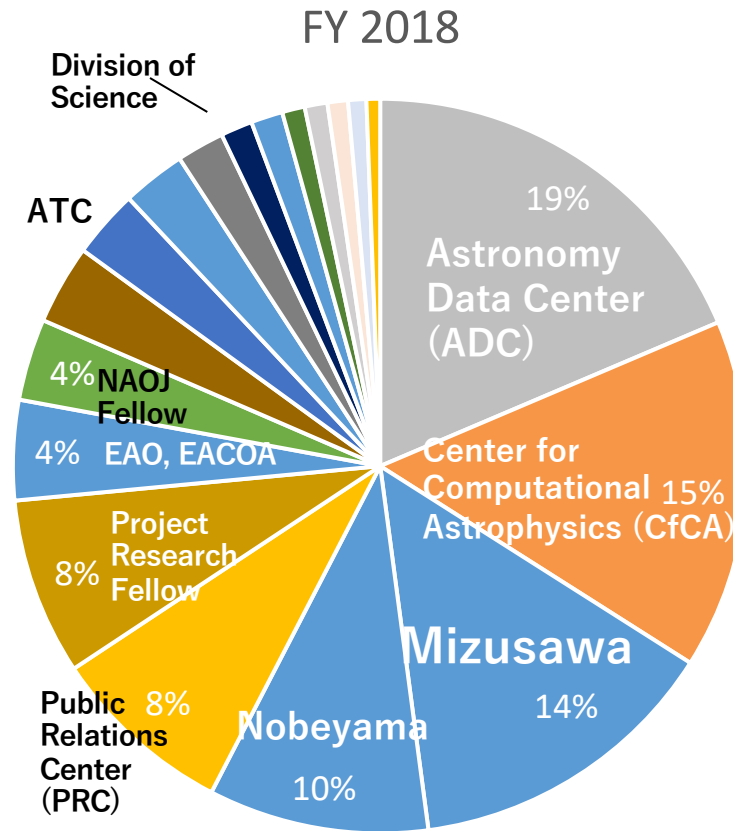
※ 機能強化経費については、FY2022 (R4) 以降ミッション実現戦略分である。

FY 2012, FY 2018, FY 2022 Operation Expenses Grants(1/2)



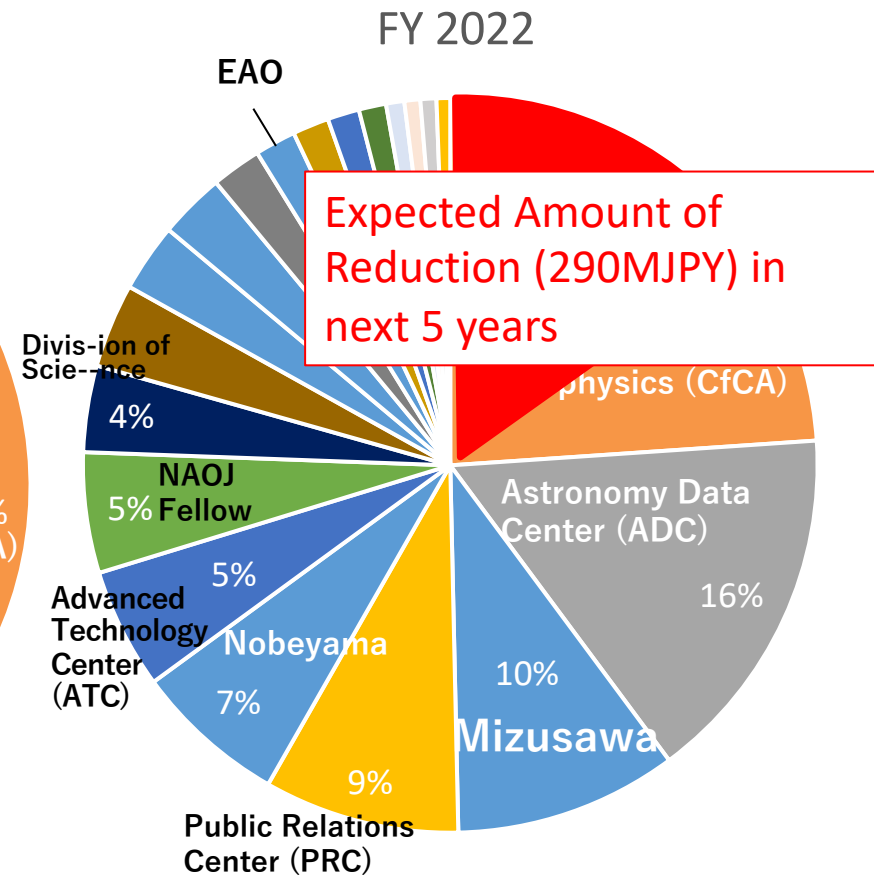
Breakdown of 2.63 billion yen out of the total 6.86 billion yen for operation expenses grants (excluding expenses for permanent staff, administration dept., and IT security)

※Division of Science refers to the total for all 5 divisions, including the divisions of Optical and Infrared Astronomy, Radio Astronomy, Division of Theoretical Astronomy, and Solar and Plasma Astrophysics



Breakdown of 2.8 billion yen out of the total 6.1 billion yen for operation expenses grants (excluding expenses for permanent staff, administration dept., and IT security)

※In FY 2018, allocations for EAO and EACOA were organized under one budget



Breakdown of 1.93 billion yen out of the total 5.94 billion yen for operation expenses grants (excluding expenses for permanent staff, administration dept., and IT security)

Taken from Tsuneta-san's Presentation

Discussions

- ▶ Selection Process of Science Roadmap of NAOJ
 - ▶ Is the information enough for the selection?
 - ▶ What selection criteria are necessary?
 - ▶ Science value
 - ▶ Feasibility
 - ▶ How rigid the study level should be?
 - ▶ Who will do the selection process

Discussions

- ▶ Other discussion points
 - ▶ Should both large and small-scale proposals selected under same criteria?
 - ▶ How to treat proposal in collaboration with other institutes, especially JAXA/ISAS?
 - ▶ What about plans beyond Subaru2 and ALMA2?
 - ▶ Should there also be a technology roadmap?
 - ▶ Data reduction will be the key.
 - ▶ How we can collaborate with industry?

Backup Slides

Policy Preliminary Draft of the Three Stage Framework under discussion at SAC

	Who	How	Contents	Prioritization Perspectives
天文学のサイエンスロードマップ Science Roadmap of Astronomy	・ 学術会議「未来の学術振興構想」(18 宇宙における天体と生命の誕生・共進化の解明, 19 自然界の基本法則と宇宙・物質の起源の探求) / Sections 18 and 19 of Science Council of Japan “Long-Range Plan” ・ 日本天文学会による検討の可能性 / Possibility of study by ASJ ・ 各研究者連絡会等の検討 / Studies by Science groups, committees and associations of specific science areas		Science cases that should be promoted	
国立天文台のサイエンスロードマップ Science Roadmap of NAOJ	国立天文台運営会議の諮問により、科学戦略委員会が将来シンポジウムSOCの協力を得て「試行」を行う。 その結果を受けて、科学戦略委員会が案を作成し、運営会議に答申する予定。		Science cases that should be promoted at NAOJ	サイエンスをベースとしつつ、国立天文台の果たすべき役割、国立天文台のリソース制約からの実現可能性も考慮する。個別の計画の優先度の粒度は2段階程度。国立天文台の予想される予算内に収めることはしない。
国立天文台実施計画 Implementation Plan of NAOJ	国立天文台 台長 DG of NAOJ	「国立天文台のサイエンスロードマップと国立天文台のサイエンスロードマップへの提案書(revise可)を入力として、運営会議の議論、国内外の研究者からのフィードバックも考慮して決定する」を基本として、今後、科学戦略委員会で検討する。	Implementation plan considering budget source, amount of budget, manpower, facilities	実行可能性(人員、予算、技術開発の内容等)が吟味された実行可能な計画とするために、個別の計画をどの予算枠で実施するかを定め、各予算枠毎の順位付がなされる。

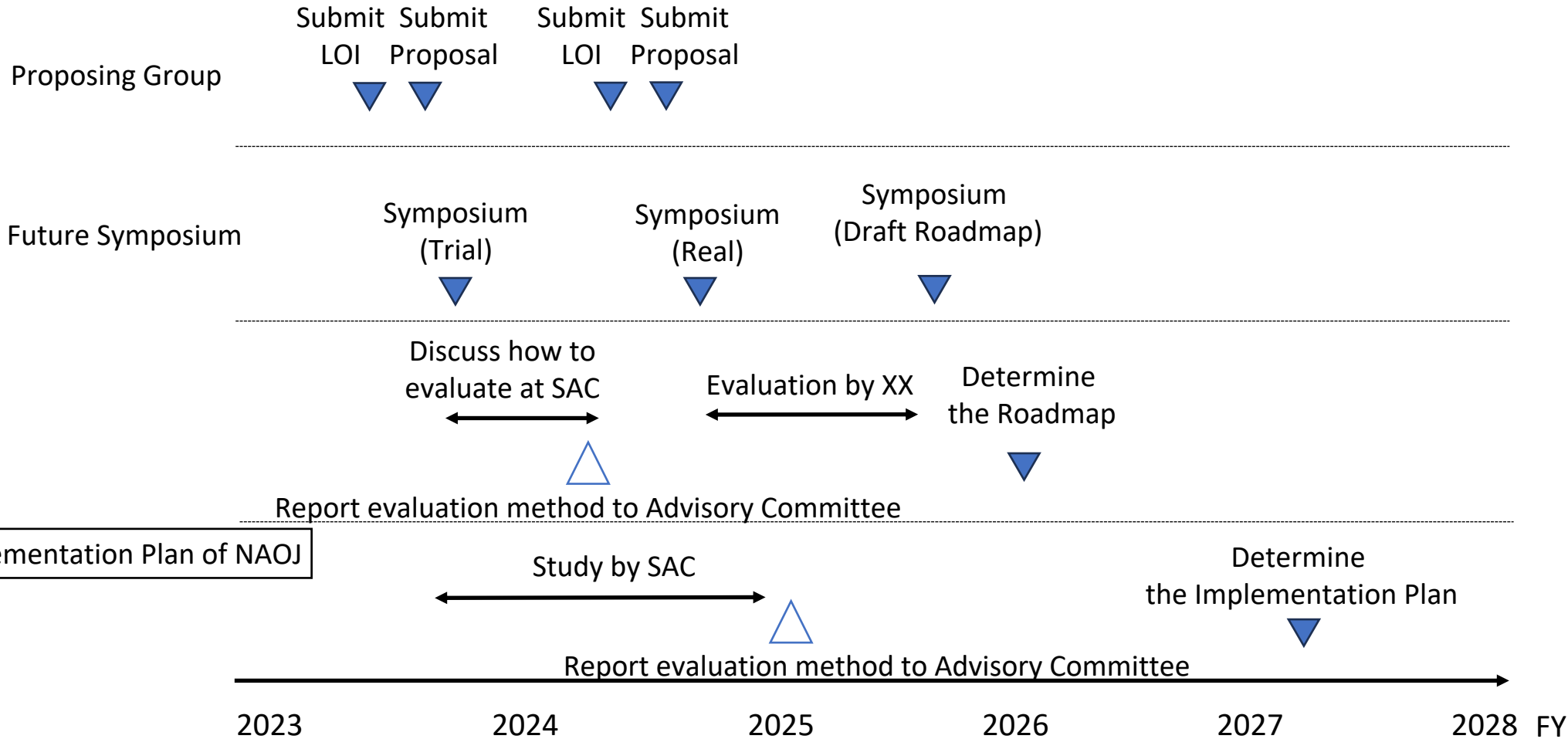
Policy Preliminary Draft of the Three Stage Framework under discussion at SAC

	Who	How	Contents	Prioritization Perspectives
天文学の サイエンスロードマップ Science Roadmap of Astronomy	<ul style="list-style-type: none"> ・ 学術会議「未来の学術振興構想」(18 宇宙における天体と生命の誕生・共進化の解明, 19 自然界の基本法則と宇宙・物質の起源の探求) / Sections 18 and 19 of Science Council of Japan “Long-Range Plan” ・ 日本天文学会による検討の可能性 / Possibility of study by ASJ ・ 各研究者連絡会等の検討 / Studies by Science groups, committees and associations of specific science areas 		Science cases that should be promoted	
国立天文台の サイエンスロードマップ Science Roadmap of NAOJ	<p>To answer the consultation of the NAOJ Advisory Committee of Research and Management, SAC decided to conduct a "trial run" in cooperation with the SOC of Future Symposium.</p> <p>Based on the results, the SAC will prepare a draft and report it to Advisory Committee</p>		Science cases that should be promoted at NAOJ	While based on science, the role of NAOJ and the feasibility of NAOJ's resource constraints will also be considered. The granularity of priority for the proposal will be two levels . The total budget will not be required to fit within the NAOJ budget profile.
国立天文台 実施計画 Implementation Plan of NAOJ	国立天文台 台長 DG of NAOJ	Not discussed within SAC well. However, the baseline will be “the NAOJ Science roadmap and the proposals to the roadmap (revision is allowed) will be used as inputs. Discussion in the Advisory Committee for Research and Management and feedback from domestic and foreign researchers will be considered before finalizing.”	Implementation plan considering budget source, amount of budget, manpower, facilities	In order to make the plans feasible and viable (manpower, budget, technological development, etc.), each plan is assigned to one of the budget source from five, and prioritized within it.

Possible Timeline for Development of Implementation Plan of NAOJ

(Updated draft by the SAC Chair)

Science Roadmap of NAOJ



Implementation Plan of NAOJ



Draft Image of the Summary of Study Results of the Science Roadmap of NAOJ, Discussed by SAC

科学の大目標 (Science goals)	ロードマップ期間内に達成する科学目的 (Science objectives to be achieved)	ロードマップに記載する計画 (Research projects to be listed in the Roadmap)	ロードマップに記載しない計画 (Projects not listed in the Roadmap)
Science Goal 1	Science Objective 1-1	Project A[1], Project B[1]	Project Z
	Science Objective 1-2	Project C[2]	Project Y
	Technical development goal for Science Objective 1-3	Development plan for Project D[2]	
Science Goal 2	Science Objective 2-1	Project A[1], Project E[3]	
	Science Objective 2-2	Project B[4]	
Science Goal 3	Science Objective 3-1	Project F[5]	
	

Numbers in [] represent the expected budget source :

1. Existing Large Science Frontier Project, 2. Management Expenses Grants (運営費交付金, including both existing and new projects, and basic development), 3. A new proposal to the Large Science Frontier Project, 4. Budgets of institutions other than NAOJ(e.g. universities, ISAS/JAXA), 5. External funds, competitive funds