2nd SVOM Scientific Workshop

SVOM General Program Organization

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Outline

- General Concept of General Program
- Working Procedure of General Program
- Support from Science Centers

General Concept of General Program

Observing Programs of SVOM:

- **Instrument Calibration**
- **Core Program**
- **Targets of Opportunity (ToO)**
- **General Program**

  A fraction of the total observing time is allocated to the observations of pre-planed targets.

General Concept of General Program

Who

- one Co-I (the Responsible Co-I)
- one Guest Observer, provided that at least one SVOM Co-I is associated with the proposal

What:

- Scientific objectives detailed in “Non Gamma-Ray Burst Science with SVOM”

Duration of observation sequences:

- 1 - 14 orbits
- 14 targets maxim per day

Distribution of Time:

- 60% to Chinese Co-Is
- 40% to French Co-Is

General of General Program

NOMINAL MISSION

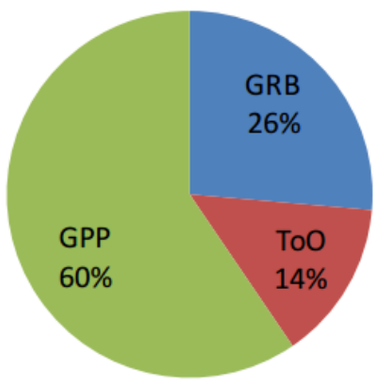
First 3 years

Progressive evolution

EXTENDED MISSION

Last 2 years

Nominal Mission
USEFUL MISSION TIME
(per year) – MRR GP2



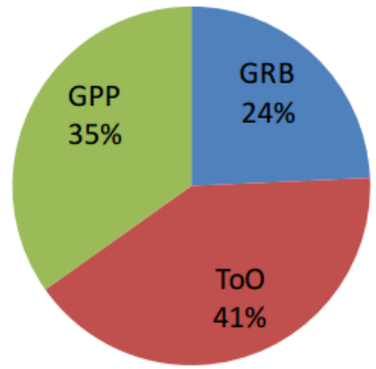
The **TOTAL TIME** :

USEFUL TIME

1. Core Program
2. ToO Program
3. General Program

4. Calibrations
5. South Atlantic Anomaly(SAA)
6. Satellite failure
7. PF maintenance and Orbit Manoeuvers

Extented Mission
USEFUL MISSION TIME
(per year) – MRR GP2



10% outside of B1 law

50% outside of B1 law

General Concept of General Program

GP “A-target”:

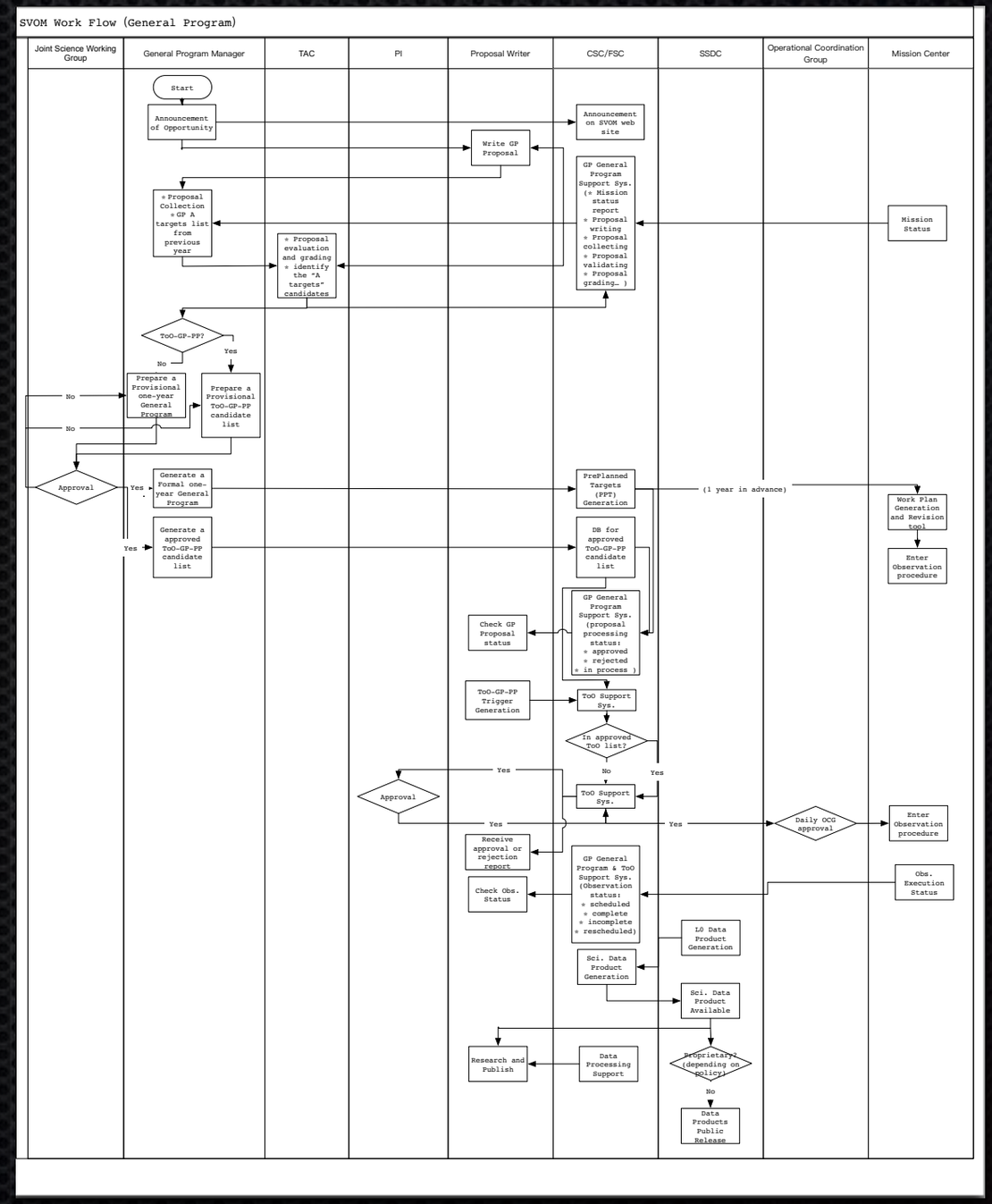
- High priority observations in GP
- Resume or be rescheduled after interruption
- Rescheduled in GP of following year
- 50% observing time of nominal mission
- 30% observing time of extended mission

General Concept of General Program

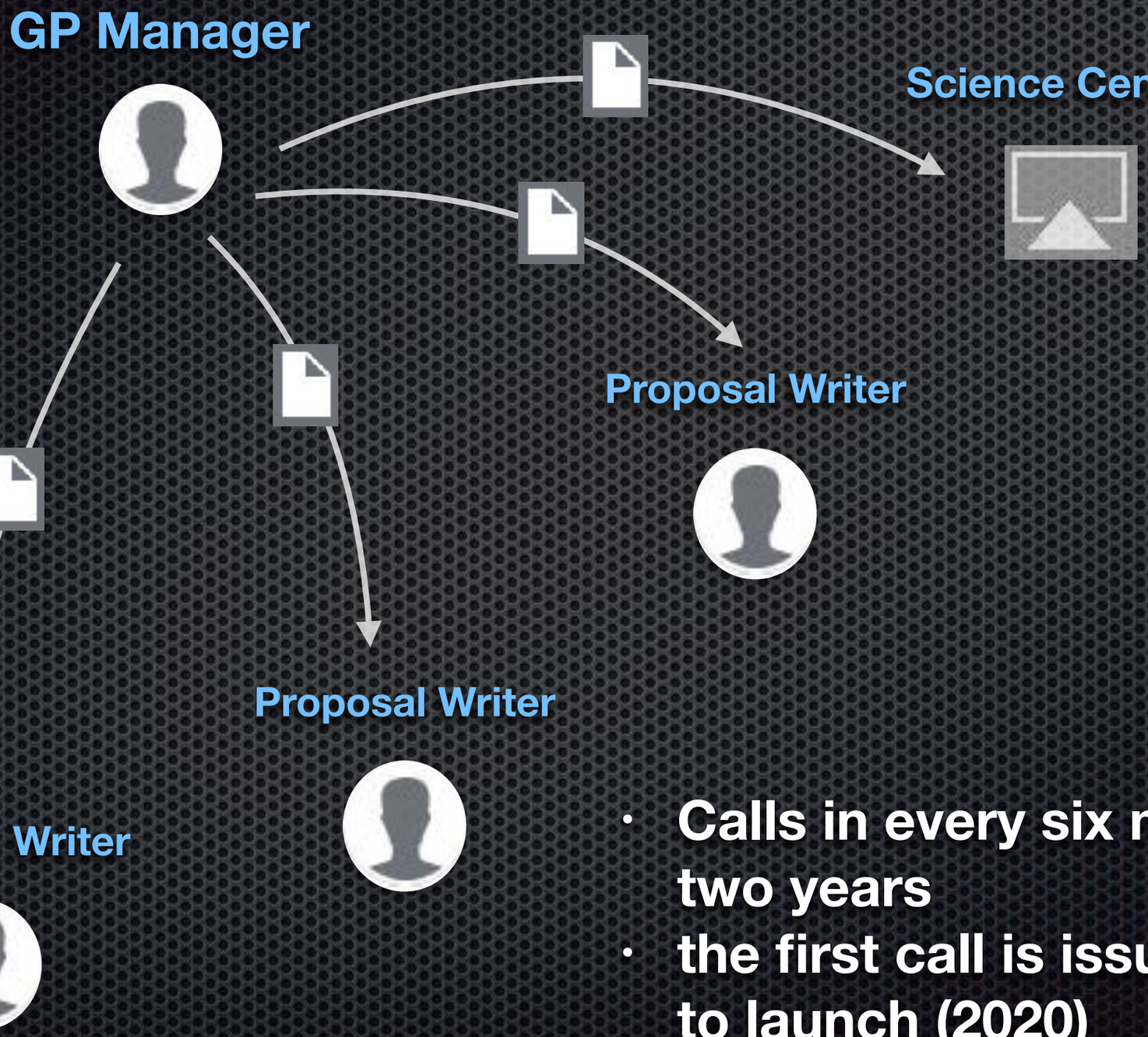
GP ToO:

- **Known sources**
- **GP selection process**
- **Approved by Time Allocation Committee (TAC)**

GP workflow


SVOM Work Flow (General Program)
Joint Science Working Group
General Program Manager
TAC
PI
Proposal Writer
CSC/FSC
SSDC
Operational Coordination Group
Mission Center
Start
Announcement of Opportunity
Announcement on SVOM web site
Write GP Proposal
GP General Program Support Sys. (* Mission status report * Proposal writing * Proposal collecting * Proposal validating * Proposal grading..)
Mission Status
* Proposal Collection * GP A targets list from previous year
* Proposal evaluation and grading * identify the "A targets" candidates
ToO-GP-PP?
Yes
No
Prepare a Provisional one-year General Program
Prepare a Provisional ToO-GP-PP candidate list
No
No
Approval
Yes
Generate a Formal one-year General Program
PrePlanned Targets (PPT) Generation
(1 year in advance)
Work Plan Generation and Revision tool
Enter Observation procedure
Yes
Generate a approved ToO-GP-PP candidate list
DB for approved ToO-GP-PP candidate list
GP General Program Support Sys. (proposal processing status: * approved * rejected * in process)
Check GP Proposal status
ToO-GP-PP Trigger Generation
ToO Support Sys.
In approved ToO list?
No
Yes
Yes
Approval
Yes
ToO Support Sys.
Yes
Yes
Daily OCG approval
Enter Observation procedure
Receive approval or rejection report
GP General Program & ToO Support Sys. (Observation status: * scheduled * complete * incomplete * rescheduled)
Obs. Execution Status
Check Obs. Status
L0 Data Product Generation
Sci. Data Product Generation
Sci. Data Product Available
Research and Publish
Data Processing Support
Proprietary? (depending on policy)
No
Data Products Public Release

Call for Proposals



- Calls in every six months in the first two years
- the first call is issued one year prior to launch (2020)

Writing Proposals

Proposal Writer

Proposal Writer

Proposal Writer

Science Centers

GP Obs. Support Sys.

- Observer documentation
- Proposal writing support tools
- Proposal reception & management tools

Mission Centers

Mission Status

Processing Proposals

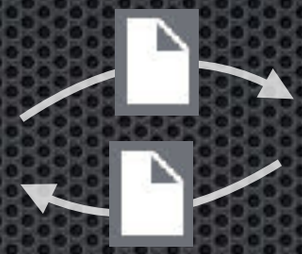
GP Manager

- Collect proposals
- Add incomplete “A targets” from T0-1 year
- Distribute to TAC

Science Centers

GP Obs. Support Sys.

- Proposal validation



TAC Member

- Evaluate proposals

TAC Member

- Evaluate proposals

TAC Member

- Evaluate proposals

Processing Proposals

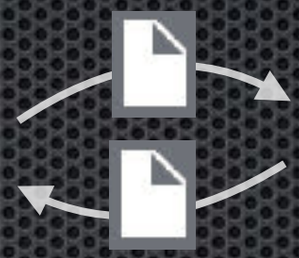
GP Manager

- Organize a time allocation review meeting

Science Centers

GP Obs. Support Sys.

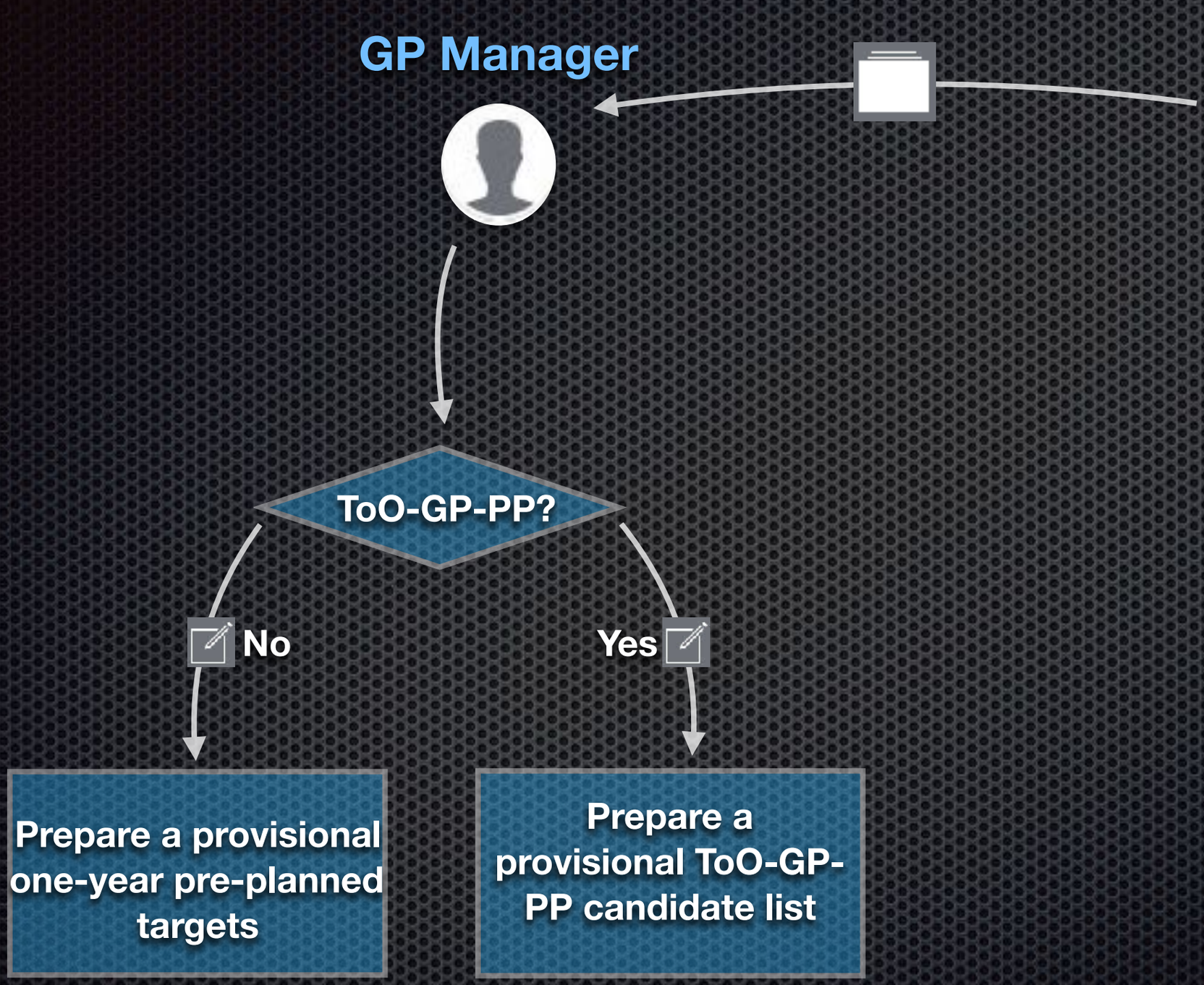
- Proposal approval



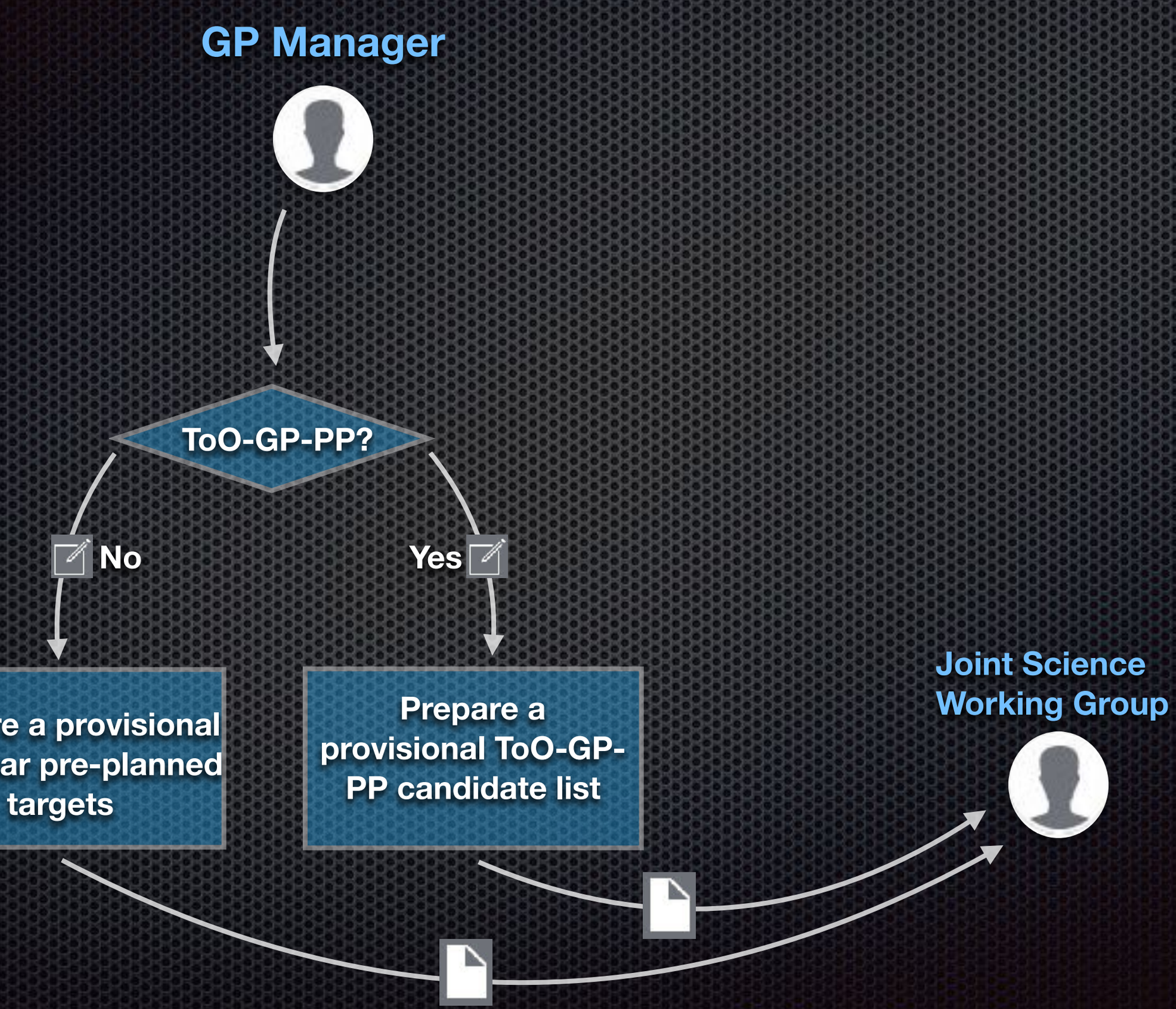
TAC Review Panel

- Select
- Identify “A-Target”

Processing Proposals



Processing Proposals



Processing Proposals

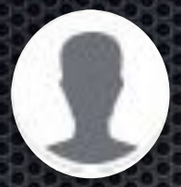
GP Manager

Approval

Joint Science
Working Group

Processing Proposals

GP Manager



Yes

- Formal one-year GP
- Formal ToO-GP-PP list
- Proposal approval or rejection report

Science Centers

GP Work Plan

Science Centers

- Generate PrePlanned Targets (PPT)

Mission Center

- Generate the work plan

Proposal Writer

- Check GP proposal status

GP Obs. Support Sys.

- proposal processing status:
  - ★ approved
  - ★ rejected
  - ★ in processing

- Execute observation

ToO-GP-PP Work Plan

Science Centers

- Approved ToO-GP-PP candidate list

Observer

- Generate ToO-GP-PP Trigger

- ToO Support Sys.

- Approval report

In approved ToO list?

Yes

PI

Approval?

Yes

Operational Coordination Group

Daily OCG approval?

Yes

Mission Centers

- Execute observation

ToO-GP-PP Work Plan

Science Centers

PI

Observer

- Approved ToO-GP-PP candidate list

Approval?

No

Operational Coordination Group

- Generate ToO-GP-PP Trigger

- ToO Support sys.

Daily OCG approval?

No

No

- Rejection report

In approved ToO list?

GP & ToO Observation

Observer

- Check observation status

Science Centers

GP Obs. Support Sys.

- Observation status:
  - ★ scheduled
  - ★ complete
  - ★ incomplete
  - ★ rescheduled

Mission Centers

- Observation status

GP & ToO Data Products

Observer

Science Centers

- Research and publish

- Generate science data products

Delay:
- within 30 days for at least 90% of the observations performed

- Data processing support

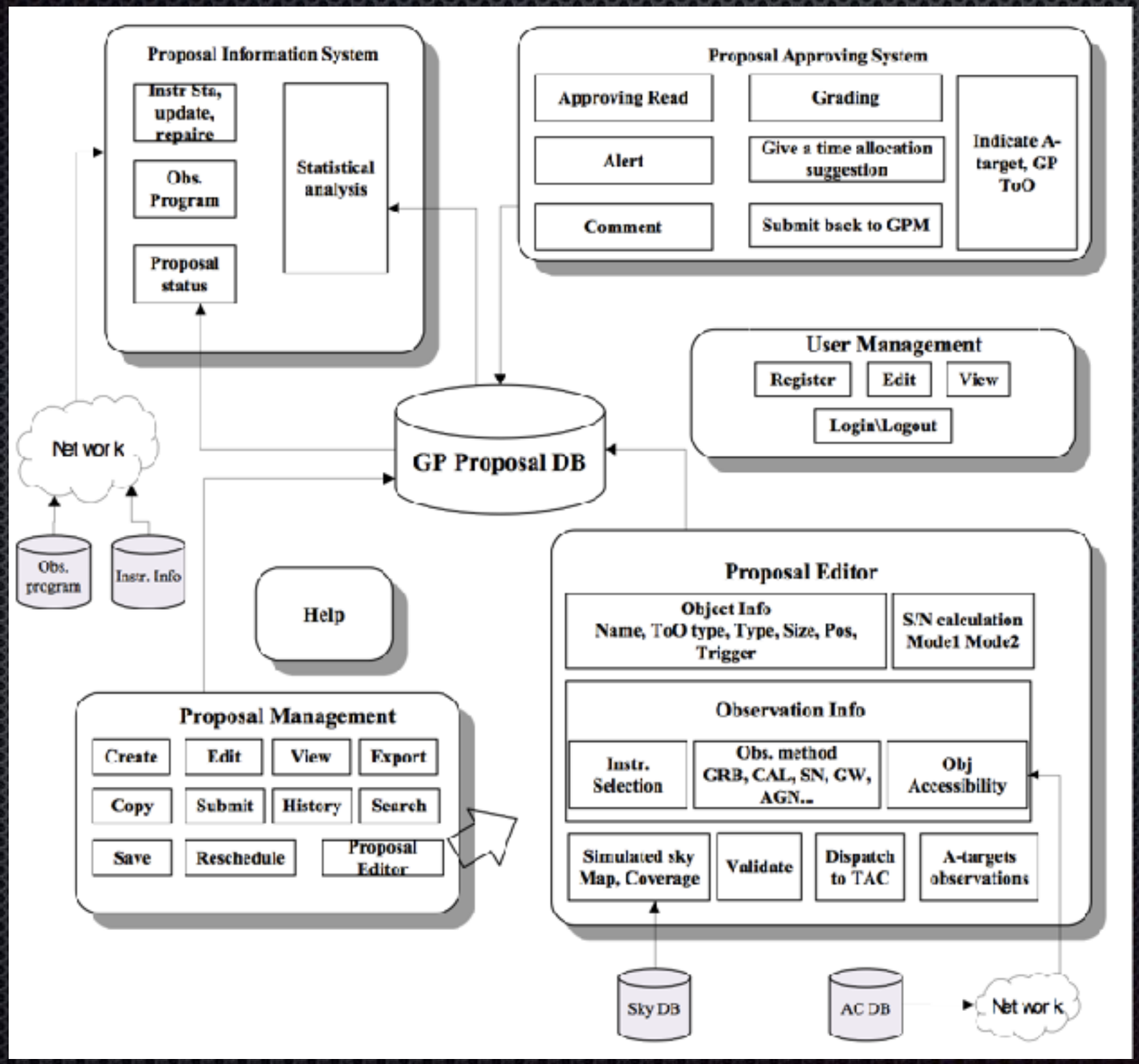
Proprietary?

One Year

- Data products public release

Getting Support from Science Centers

General Program Support System



General Program Support System

Aim

- The General Program Support System is for SVOM scientists to submit, to process GP proposals, and to access GP observation status.

User

- GP proposal writer
- GP Manager
- TAC

Main Functions of Support System

- User management
- Proposal management
- Proposal editor
- Proposal/observation information
- Proposal approval
- Database support

Proposal editor

- Basic editing functions
- **Required information**
- Supporting functions

Notices:

1. time constrains
2. synchronous observations
3. revisit strategy
4. resuming strategy

- Interface for filling in the following information:
  - Information of proposal writer and Co-I
  - Proposal body to show the scientific merit
  - Object or object list, name, type, size, position or position list
  - Expected exposure time, observation duration, time window
  - Applied instruments (GFTs included)
  - Observation mode

Proposal editor

- Basic editing functions
- Required information
- **Supporting functions**
  - Simulating observable time slots
  - Estimating signal to noise ratio from expected brightness and exposure time
  - Simulating sky images (VT)
  - Searching SVOM observation history

Conclusion

- SVOM Co-I & Guest observer with Co-I
- 60% of observing time in Nominal Mission
- GP “A-target”
- GP-ToO
- First Call of proposals in 2020
- Synchronous observation with GFTs (5%)
- Support from Science Centers

Thank you for your attention!