



BIAS Operations Plan

X.Bonnin and the ROC Team

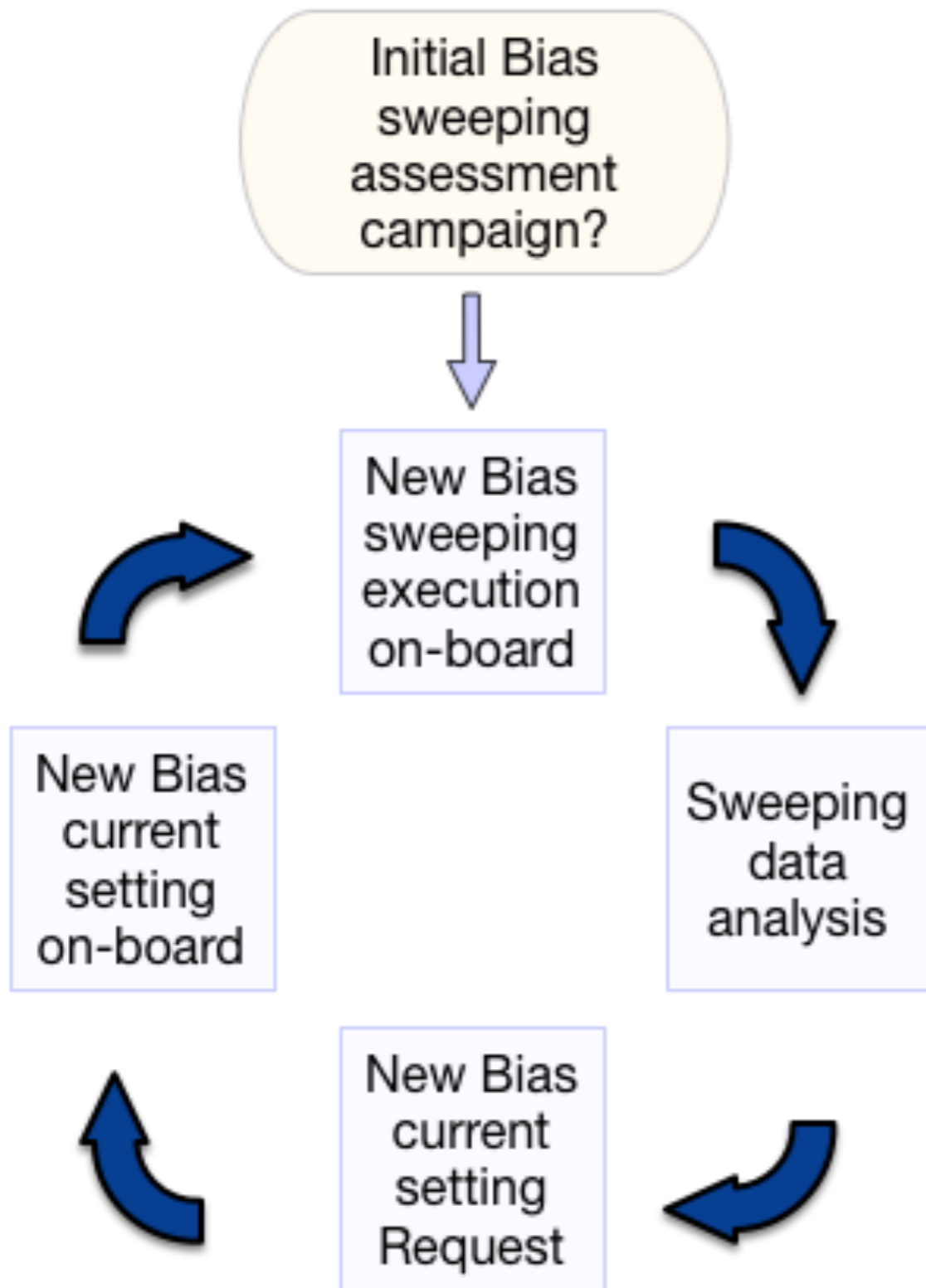
- Context & Objectives
- Bias current setting life-cycle
- Bias current setting request submission
- BIAS operations ICD

Context

- ROC team has started to define what will be the routine operations to be performed on-board every week, as well as the corresponding ROC team activity to be scheduled on-ground (see presentations tomorrow)
- Operations are constraint by the Mission MTP/STP planning at ESA level. Among others:
 - At best, duration between two S/C passes can be short (< 10 days) —> Short time of react
 - At worst, duration between two S/C passes can be long (> several weeks) —> Long time before being able to change instrument config. on-board
- Bias unit is directly involved : Bias sweeping (every week), Bias calibration (every week) and Bias current setting (when necessary)

Objectives

- ROC wants to:
 - Clarify the role of the ROC and Bias teams for these operations. Initial « rough » assumptions are: ROC operates the instrument. Bias team has the expertise: basically it analyses the sweeping data and prepares the current/sweeping settings
 - Define a plan for these operations
 - Formalize the interfaces required for these operations
 - Define with Bias team the expected data products (e.g., L1 CDF Bias sweeping discussed during the telecon on March)



Assumptions

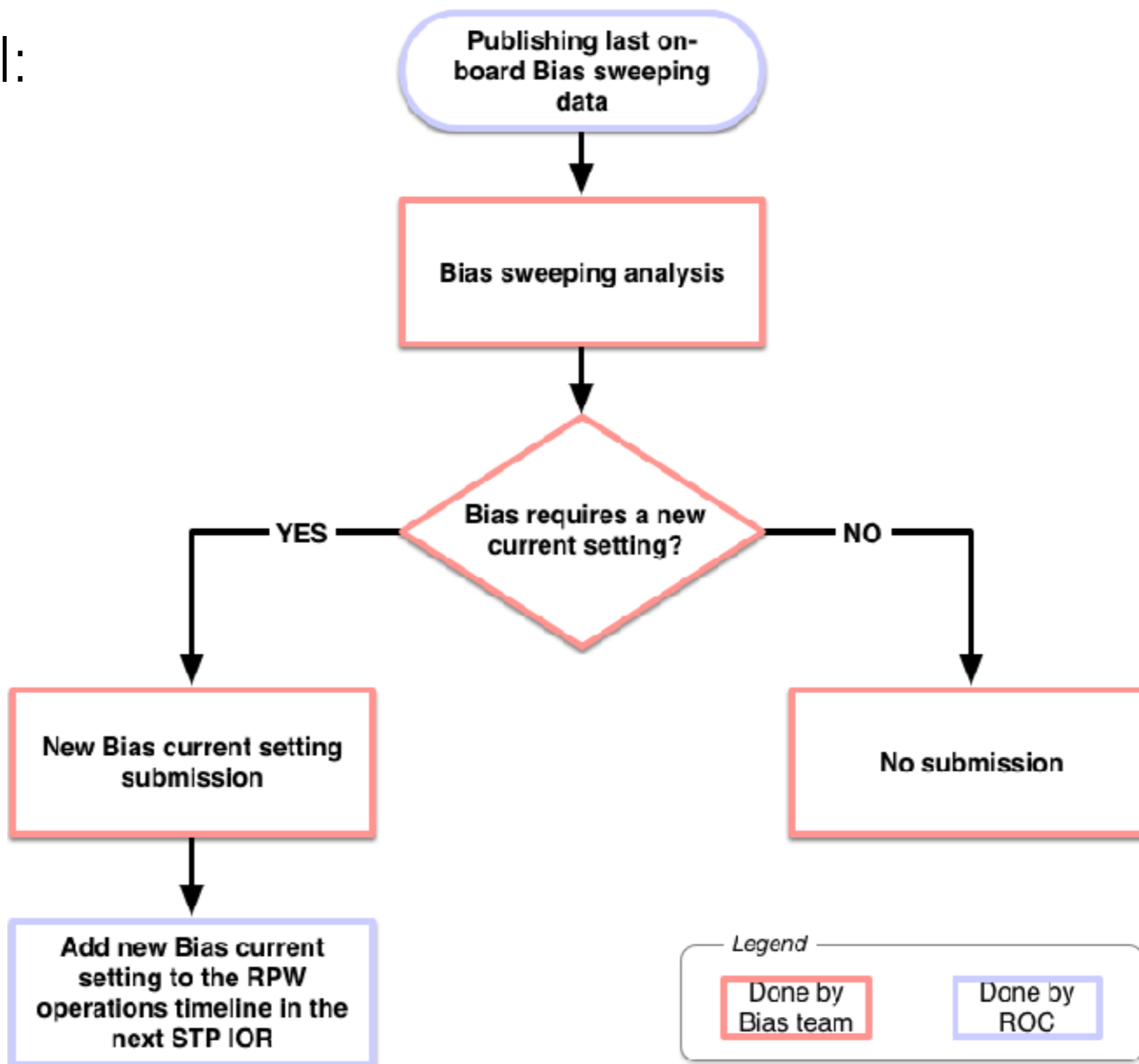
- Sweeping table fixed during the nominal phase (from an first series of sweeping data analysis during Cruise Phase)
- Bias current might not need to be changed every week

Open to discussions

- Do we need to plan a specific validation campaign, with specific modes, during the cruise phase? (If yes, shall be possibly compliant with the mission timeline)
- What will be the approx. time latency required between sweep analysis and new current setting on-board?

ROC would like to optimize as much as possible this cycle (and if possible to minimize the human intervention for the interface.)

Proposal:



Inputs from Bias to ROC

- Bias current setting request — Format and content TBD
- Bias sweeping setting request — Format and content TBD

Inputs from ROC to Bias (and consortium)

- CDF L1 Bias sweeping data (every time a sweeping has been performed on-board) — Cf. « solo_L01_RPW-BIA-SWEEP dataset
- Bias HK (as soon as received at LESIA)
- Ancillary data
- Bias current/sweeping setting request status (e.g., « accepted », « submitted to MOC », « executed on-board », ...)
- CDF L1 Bias current values (separated L1 CDF dataset? Include in identified datasets? Replaced by the Bias current/sweeping setting request?)
- Passes schedule (using MUSIC/OPERA Web tool of the ROC?)

ROC proposes to write a dedicated « Bias operations ICD »

Approval of the concept of the Bias operations

Discussion on the Bias operation planning and ROC/Bias teams responsibilities

Discussion on the ROC proposal concerning:

- The Bias current/sweeping setting request submission concept
- The Bias operations ICD