Akraino Maturity and Core Graduation Review Proposal
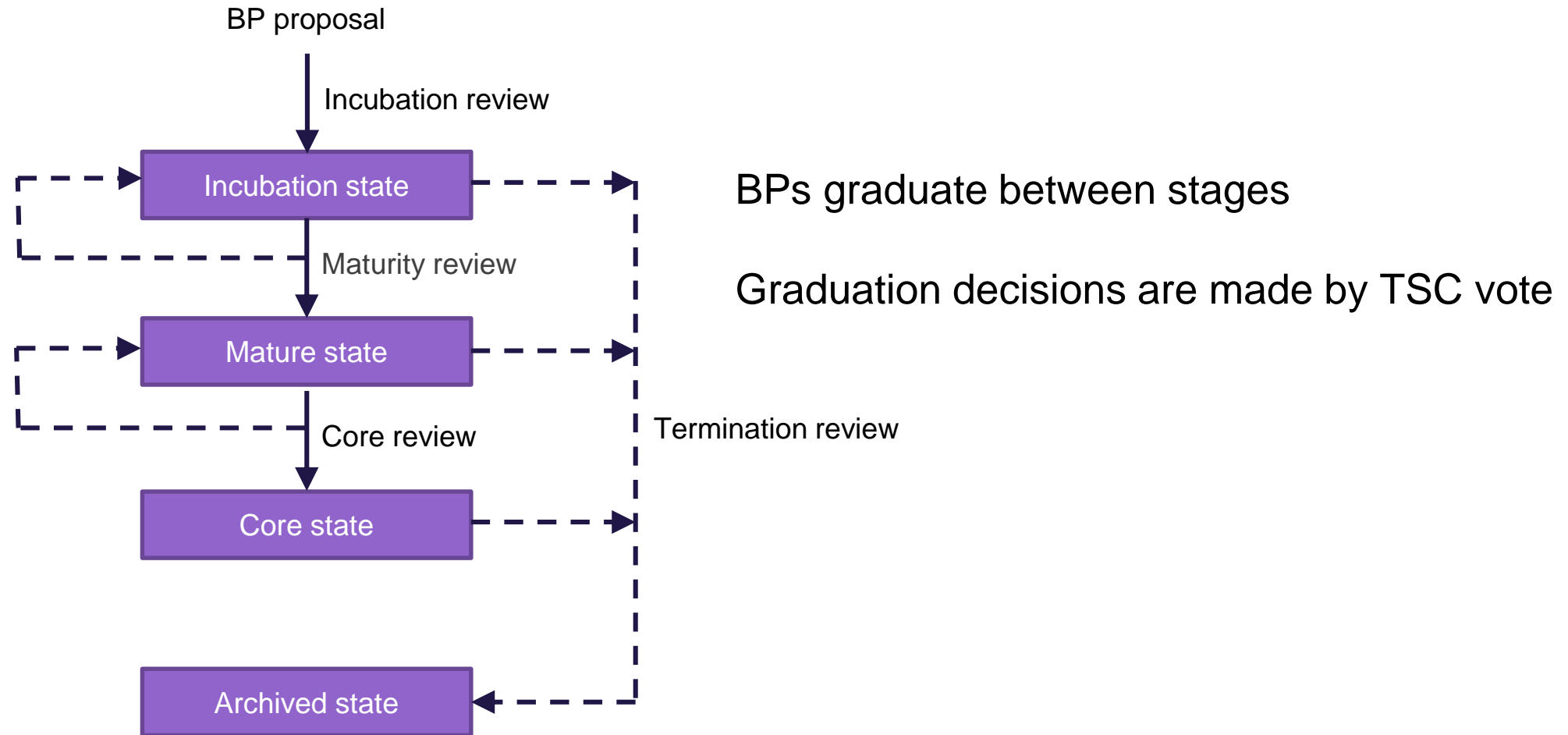
TSC feedback and voting requested as soon as possible

Process Sub-Committee

Currently defined BP stages/states

❖ After a BP has been approved into the 'Incubation' stage by the TSC development / verification under the supervision of Akraino starts
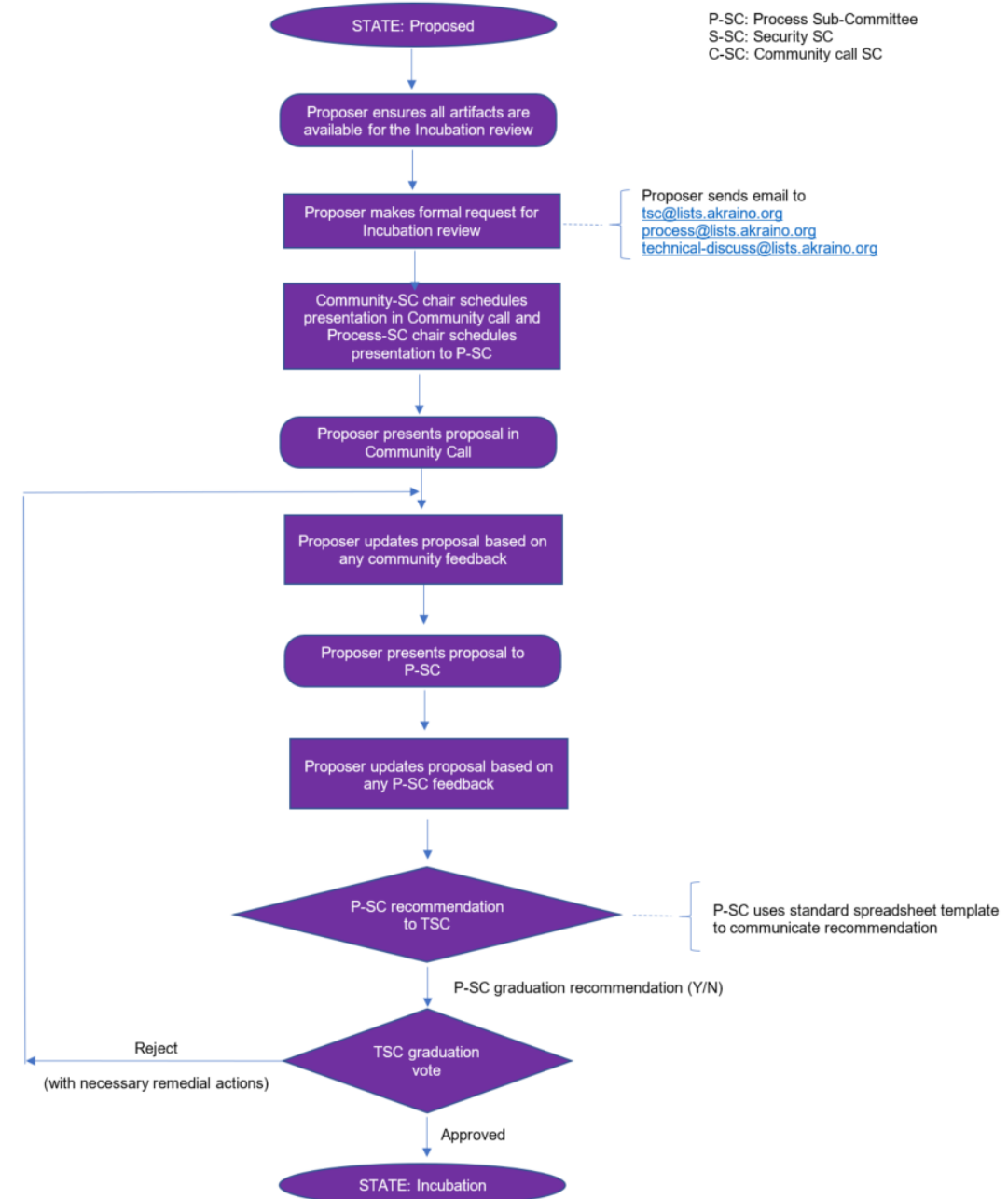
BP proposal

Incubation review

Incubation state

Maturity review

Mature state

Core review

Core state

Termination review

Archived state

BPs graduate between stages

Graduation decisions are made by TSC vote

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Incubation review

Incubation graduation process

High level:

- FP/BP proposer initiated
- Process sub-committee central point of coordination and graduation recommendation to TSC
- Proposer presents to TSC community call then to Process SC
- P-SC recommendation provided in standard format for TSC voting

STATE: Proposed

P-SC: Process Sub-Committee
S-SC: Security SC
C-SC: Community call SC

Proposer ensures all artifacts are available for the Incubation review

Proposer makes formal request for Incubation review

Proposer sends email to
tsc@lists.akraino.org
process@lists.akraino.org
technical-discuss@lists.akraino.org

Community-SC chair schedules presentation in Community call and Process-SC chair schedules presentation to P-SC

Proposer presents proposal in Community Call

Proposer updates proposal based on any community feedback

Proposer presents proposal to P-SC

Proposer updates proposal based on any P-SC feedback

P-SC recommendation to TSC

P-SC uses standard spreadsheet template to communicate recommendation

P-SC graduation recommendation (Y/N)

TSC graduation vote

Reject
(with necessary remedial actions)

Approved

STATE: Incubation

Mature/Core review

Mature / Core Graduation assessment

- The Tech Community Document currently includes some description of the project reviews (section 3.3.7.2/3)

- However many criteria are subjective and without quantification

- With 18 BPs and growing the TSC plenary will not be able to adequately review and give remedial feedback without delegation to sub-committees for recommendation

- Some examples of current lack of objective criteria:

  - *Successful integration test*

  - *Stability, Security, Scalability and Performance levels have reached a high bar*

  - *The project demonstrates that the artifacts produced by the project are deployable*

  - *Artifacts for Incubation/Mature/Core State are complete and accepted*
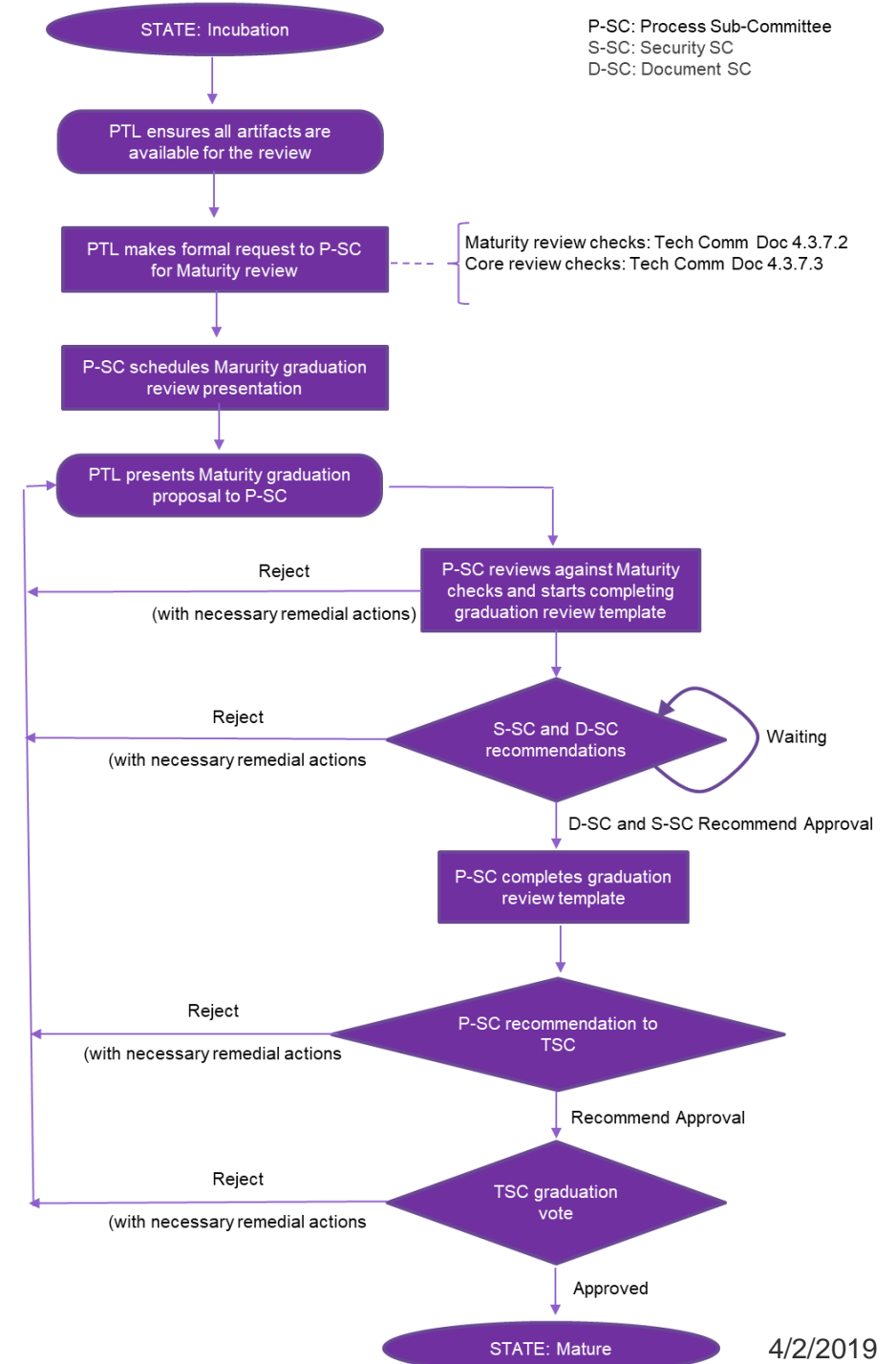
Mature / Core Graduation assessment

- On request of the TSC the Process Sub-Committee has studied the current language and the practicality of the TSC performing reviews for so many BPs

- We are proposing a set of updated more precise criteria (checks) for the reviews, a clear process with identified ownership that includes delegation to sub-committees where appropriate. Our target is to:

  - Ensure the BP quality permits:

    - User FOA/PoC deployments after Maturity review

    - Commercial/live deployments after Core review

  - Make TSC graduation voting objective and non-subjective

  - Be practical to implement with clear process component ownership and delegation

  - Enable PTLs to drive their BPs to Maturity and then to Core with a clear process

Maturity Graduation Process

https://wiki.akraino.org/display/AK/BP+Graduation+Review+Processes+and+Criteria+Proposal

High level:

- PTL initiated
- Process sub-committee central point of coordination and graduation recommendation to TSC
- Approval input from Security and Documentation sub-committees
- Recommendation provided in standard format for TSC voting

- Note: TSC voting members may then choose to dig into any area more deeply and/or disregard the recommendation

P-SC: Process Sub-Committee
S-SC: Security SC
D-SC: Document SC

STATE: Incubation

PTL ensures all artifacts are available for the review

PTL makes formal request to P-SC for Maturity review

Maturity review checks: Tech Comm Doc 4.3.7.2
Core review checks: Tech Comm Doc 4.3.7.3

P-SC schedules Marurity graduation review presentation

PTL presents Maturity graduation proposal to P-SC

P-SC reviews against Maturity checks and starts completing graduation review template

Reject
(with necessary remedial actions)

S-SC and D-SC recommendations

Waiting

Reject
(with necessary remedial actions

D-SC and S-SC Recommend Approval

P-SC completes graduation review template

P-SC recommendation to TSC

Reject
(with necessary remedial actions

Recommend Approval

TSC graduation vote

Reject
(with necessary remedial actions

Approved

STATE: Mature

Proposed Maturity Graduation Criteria

https://wiki.akraino.org/display/AK/BP+Graduation+Review+Processes+and+Criteria+Proposal

3.3.7.2 Maturity Review:

On a successful graduation the BP HW/SW package is deemed to be Beta-Quality and the BP moves to the Mature stage.

The collective TSC vote as defined in Akraino Technical Community Document#4.4.1TSCDecisionMakingProcess will be based on all the following set of checks being met:

- **Validation lab check:**

The BP project contributors have deployed and validated the BP in at least 2 community member validation labs or a community member validation lab and LF CD lab with the exact HW and SW configuration for which the maturity review is being requested. All validation labs are required to connect with Akraino LF CI. Logs on the LF CI servers pushed from each validation lab's CD testing would be used to verify this check. ~~The environment should be reviewed and endorsed by the CI/CD Sub-Committee.~~ [Question : Do we really need to have the CI/CD sub-committee review a validation lab's internal CI/CD architecture? If so how would this be practically done since access to the validation lab will not generally be granted to other community members?]

- **Release inclusion check:**

Successful participation in at least two Akraino release periods in the incubation stage [Note : This implies that nothing will be Mature in Akraino R1 - however a PTL could request a maturity review anytime after R1 i.e. Graduation to Maturity would be possible in R2 from 1st June onwards – TSC should confirm that's what they want]

- **SW quality/functional check:**

The SW quality will be assessed as reaching beta according to :

1. Passing the mandatory set of test cases for all deployed layers using the tools and test set for each layer as defined by the Akraino Validation Framework Validation feature project (Akraino Blueprint Validation Framework) (after TSC approval). This will define minimum mandatory set of test that must be passed for each layer included in BP, plus
2. Passing any additional test cases defined by the specific BP project as mandatory, plus
3. Achieving the minimum Security requirements as defined by the Security subcommittee [Note : the mechanism of security testing / review has not been proposed / agreed]

- **HW definition check:**

Precise HW requirements and descriptions are defined and included in the BP's documentation (as used in both lab validations)

- **Upstream dependencies check:**

Upstream dependencies must be clearly defined

- **Documentation check:**

Documentation subcommittee to provide a recommendation on graduation, or if not with items requiring action/remedy.

This check includes verification that any supported APIs are clearly documented

- **Community Health and Stability check:**

PTL should provide a summary of contributors and committers and companies and demonstrate growth - Project is active and contributes to Akraino: The project demonstrates increasing number of commits and/or number of contributions across recent releases. Contributions are commits that have been to an Akraino repository project or related upstream project. Commit examples can be patches to update the requirements document of a project, code addition to an Akraino or upstream project repository, new additional test cases and so forth. [maybe create a template, or use something like Bitergia to get some consistent metrics coming into this review].

The PTL should demonstrates stable output (code base, documents) within its history of releases in accordance with the release policy.

Proposed Core Graduation Criteria

https://wiki.akraino.org/display/AK/BP+Graduation+Review+Processes+and+Criteria+Proposal

3.3.7.3 Core Review:

On a successful graduation the BP HW/SW package is deemed to be GA-Quality and the BP moves to the Core stage.

The collective TSC vote as defined in Akraino Technical Community Document#4.4.1TSCDecisionMakingProcess will be based on all the following set of checks being met:

- **Deployment check:**

The BP project been deployed in at least 2 production networks/locations with the exact HW and SW configuration for which the core review is being requested.

- **Release inclusion check:**

Successful participation in at least two Akraino release periods in the mature stage

- **SW quality/functional check**:

The SW quality will be assessed as reaching GA quality according to :

1. Passing the mandatory set of test cases for all deployed layers using the tools and test set for each layer as defined by the Akraino Validation Framework Validation feature project (Akraino Blueprint Validation Framework) (after TSC approval). This will define minimum mandatory set of test that must be passed for each layer included in BP, plus
2. Passing any additional test cases defined by the specific BP project as mandatory, plus
3. Achieving the minimum Security requirements as defined by the Security subcommittee [Note : the mechanism of security testing / review has not been proposed / agreed. It is expected the security requirements for a core review be more stringent/extensive than an mature review]

- **HW definition check**:

Precise HW requirements and descriptions are defined and included in the BP's documentation (as used in both the lab validations and the production deployments)

- **Upstream dependencies check:**

Upstream dependencies must be clearly defined

- **Documentation check**:

Documentation subcommittee to provide a recommendation on graduation, or if not with items requiring action/remedy.

This check includes verification that any supported APIs are clearly documented.

[It is expected the documentation requirements for a core review be more stringent/extensive than an mature review]

- **Community Health and Stability check:**

PTL should provide a summary of contributors and committers and companies and demonstrate growth - Project is active and contributes to Akraino: The project demonstrates increasing number of commits and/or number of contributions across recent releases. Contributions are commits that have been to an Akraino repository project or related upstream project. Commit examples can be patches to update the requirements document of a project, code addition to an Akraino or upstream project repository, new additional test cases and so forth. [maybe create a template, or use something like Bitergia to get some consistent metrics coming into this review].

The PTL should demonstrates stable output (code base, documents) within its history of releases in accordance with the release policy.

Consistent Assessments

- We recommend to use a template based consistent means of reporting the P-SC recommendations to the TSC for each BP (and FP) review

- Based on a restricted edit spreadsheet (Process SC, Doc SC and Security SC write access)

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Request to TSC

TSC Action

- Request approval of Incubation review process <u>and</u> criteria (or input for changes)

- Request approval of Maturity review process <u>and</u> criteria (or input for changes)
- Request approval of Core review process <u>and</u> criteria (or input for changes)

- Request identified Sub-Committees (Security and Documentation) to develop practically workable processes to enable them to make their mature and core graduation review recommendations to the Process sub-committee

- Once approved TSC to approve that the Technical Community Document plus all other content and references in wiki to be updated accordingly