

Tips from the reviewers' point of view (personal)

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Reference

- Updated ALMA Principles of the ALMA Proposal Review Process
 - <https://almascience.nao.ac.jp/documents-and-tools/cycle5/alma-proposal-review-process>)
- User's Guide to the East Asian ALMA Regional Center (EA-ARC)
 - <https://almascience.nao.ac.jp/documents-and-tools/cycle5/alma-ea-arcguide>
- ALMA Cycle 5: Selection Statistics
 - <https://almascience.nao.ac.jp/news/documents-and-tools/cycle5/alma-cycle5-stats>

How to deliver message is 90 %.

- There is a book entitled “how to deliver message is 90 %”.
- More than one million copies have been sold.

<= people want to deliver message to listeners, but they sometimes do not correctly understand.

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<= PIs want to deliver message to assessors, but they sometimes do not correctly understand.

Who are Science Assessors (reviewers)?

- ALMA programs are selected through competitive peer review.
- The reviewers consist of scientists selected from the international astronomical community.
- The reviewers are assigned to individual ALMA Review Panels (ARPs) that are specialized in a scientific category.
- The ALMA Proposal Review Committee (APRC) consists of the chairs of each ARP and a Chair, who is selected from the international community by the ALMA Director.

Science Merit

- The primary criteria to rank all proposals are the overall scientific merit of the proposed investigation and their potential contribution to the advancement of scientific knowledge.

Who are Actual Science Assessors?

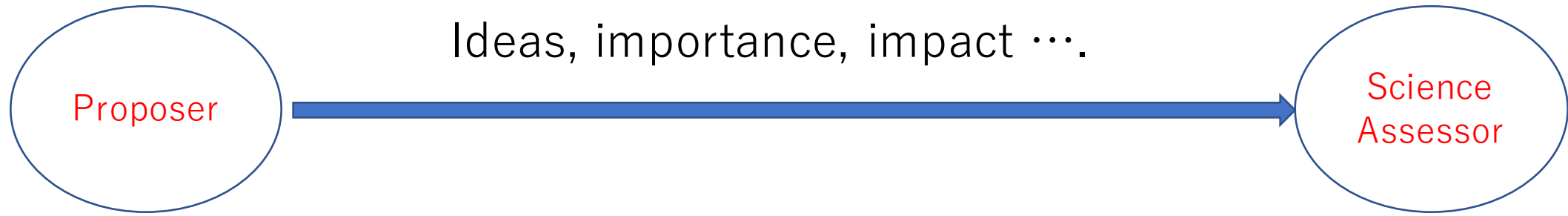
- The reviewers consist of scientists selected from the international astronomical community including EA (Japan, Korea, and Taiwan).
- They are not 100 % pure assessors. They have duty work, education, their own research, admin, and management. They volunteer to review 80-100 proposals in a few weeks.
- The APR meeting is away from the first round. They have to remember the proposals in a short time.
- Past reviewers' name can be found in Cycle X statistic doc.

ALMA Proposal Category

1. Cosmology and the high redshift universe
2. Galaxies and galactic nuclei
3. ISM, star formation and astrochemistry
4. Circumstellar disks, exoplanets and the solar system
5. Stellar evolution and the Sun

Sometimes a reviewer may have to read proposals far from his/her specialty (e.g. Category 4 and 5)

Ideal Transfer Function



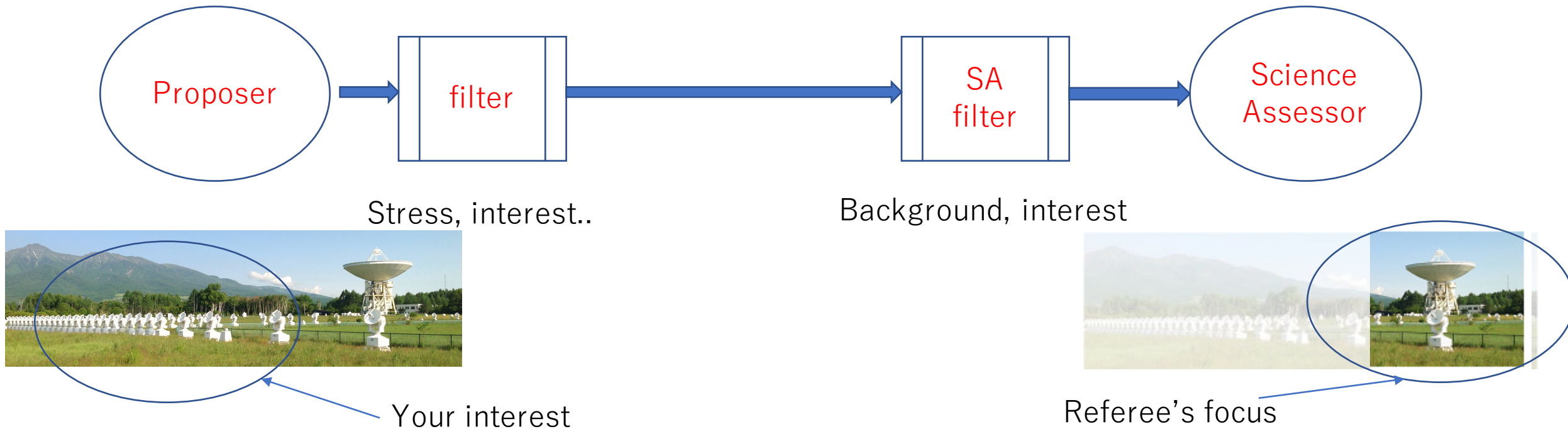
Your interest



Realistic Transfer Function (Filter)

SA may receive skewed message through two filters.

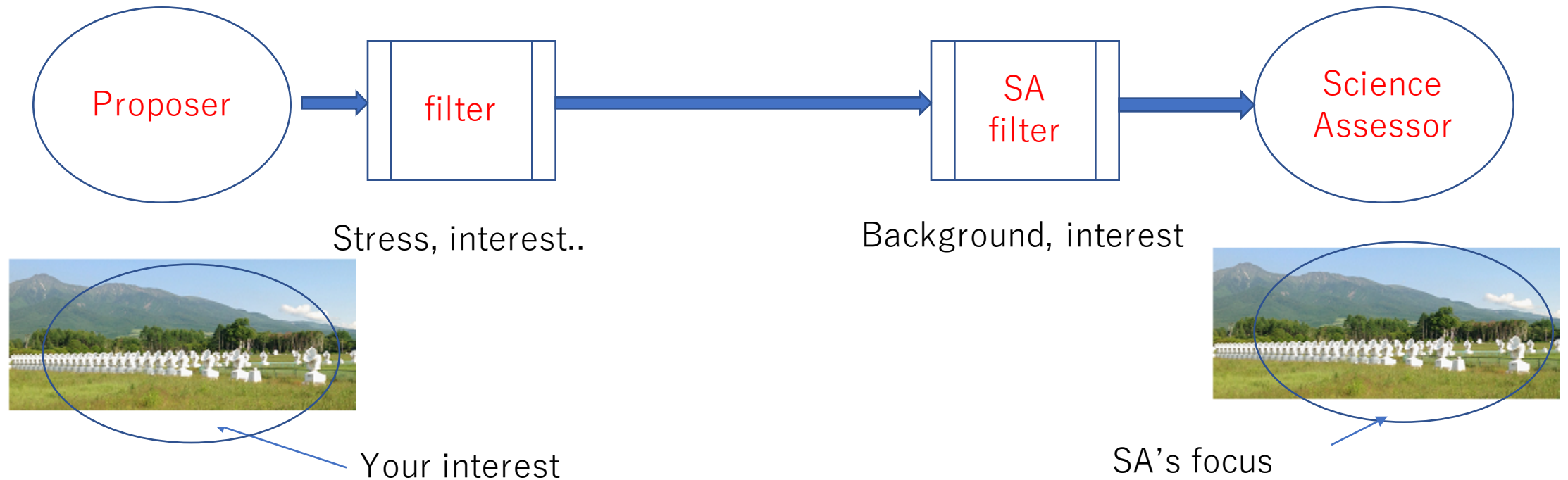
Ideas, importance, impact ...



Realistic Transfer Function (Filter)

Cut unnecessary information

Ideas, importance, impact ...



Referees would like to know

- What is an unresolved issue in your field?
- Is it important or does it make a big impact in the field?
- Why has it not been addressed before?
- How will you address it with ALMA (in unique or original ways)?

Good example: Conflicting scenarios

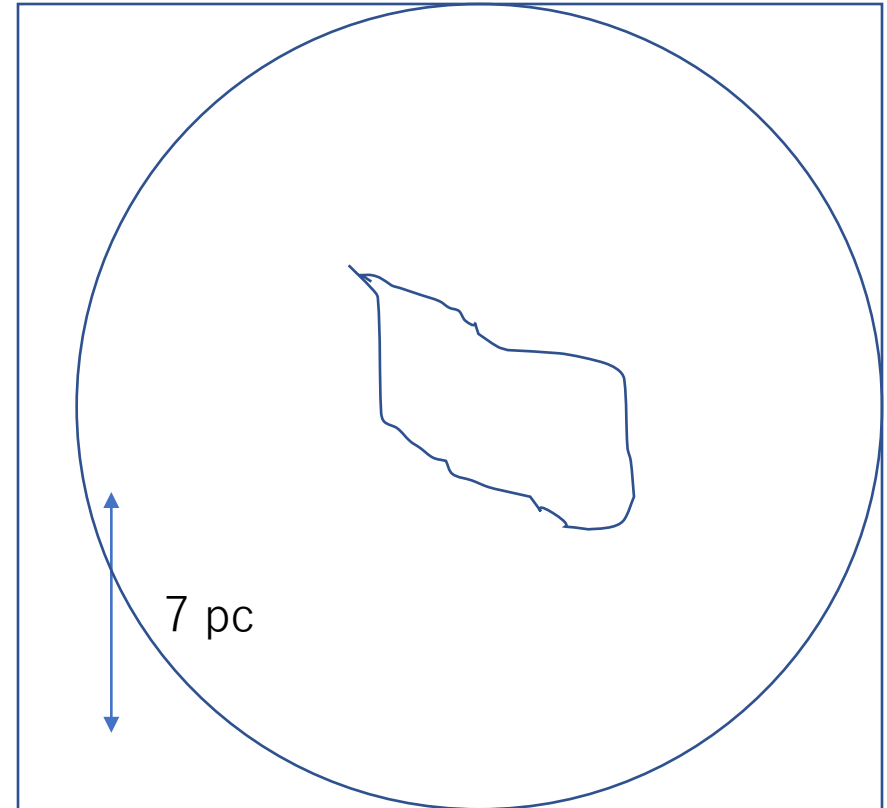
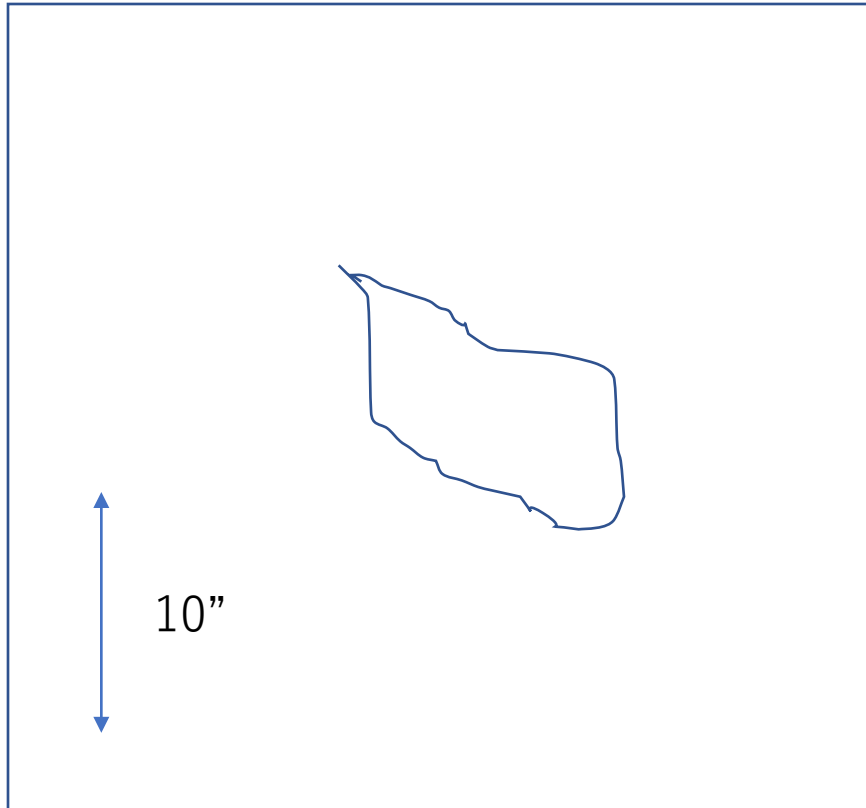
- Two contradict scenarios in your field
- Each scenario expects different observation outcome ideally quantitatively (supported by simulated observations)
- ALMA capability enables one to separate one scenario from the other.

Bad example: just do it

- We have low resolution data.
- We need high spatial resolution.
- We can see something interesting.

Descriptive Proposals are usually
not highly rated

Tips: Figure



Ask appropriate time if needed

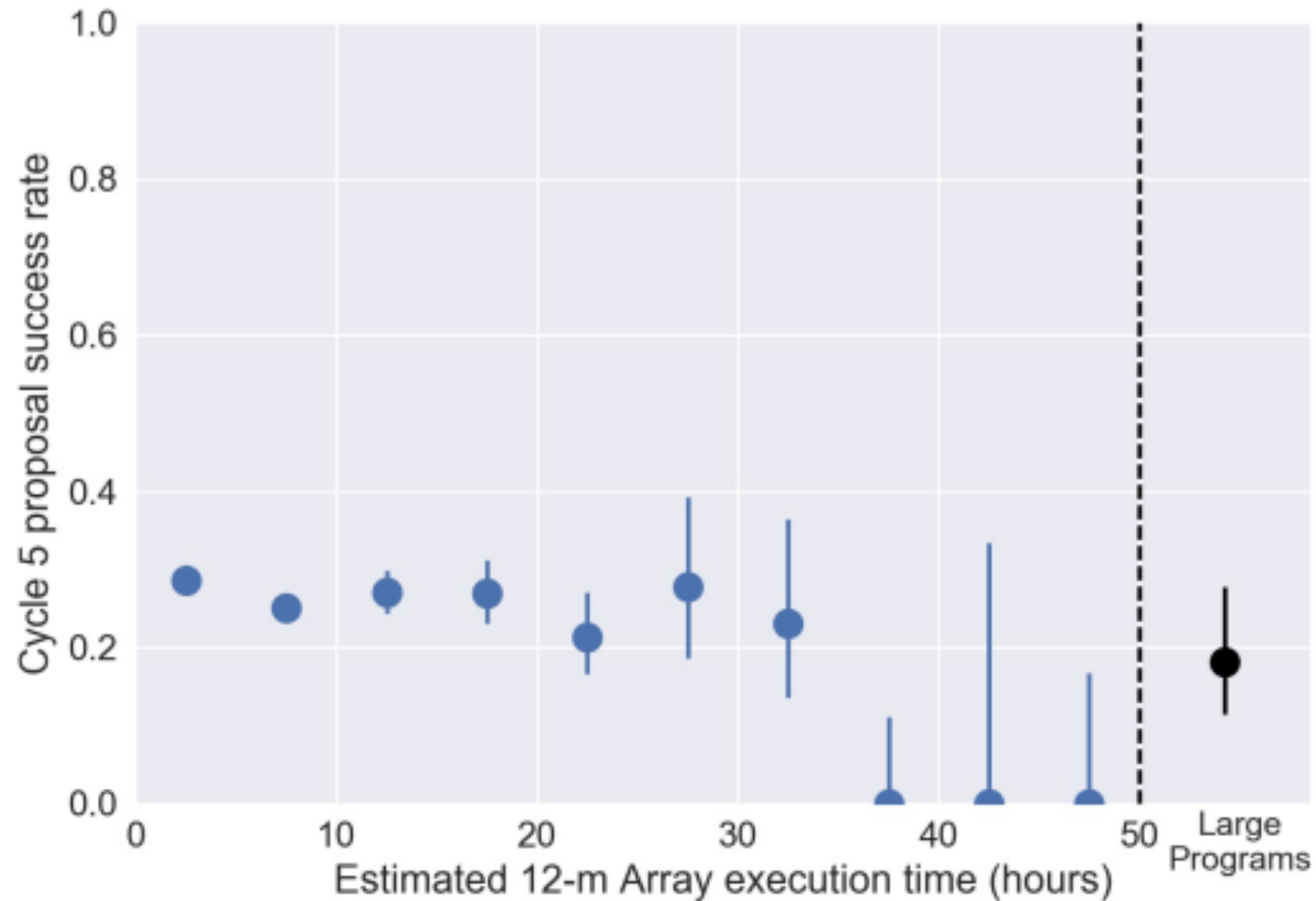


Figure 5. The fraction of proposals (with 1σ confidence intervals) that are assigned priority Grade A and B as a function of the estimated 12-m Array execution time.

TIPS

- Prior to the meetings, all written science comments and grades will have been filled in and made available to the panels.
- First stage: manage to pass the first-cut triage because no further review is performed.
- Second stage: Experts' comments (frequently Primary Assessor) are well taken in the ARP meeting.
- You have to persuade non-experts in some sense as well as experts.

Worth asking your colleagues in different fields to read your proposals in advance.

Summary

- Understand review process
- Your proposal should stand out among similar proposals.
- Think about the science assessors who have heavy load and may have different interest.
- Deliver a clear story to assessors.