

Payload requirements in order of priority? (at least from ESA perspective)

- Costs
 - 550 M€ + ? EU National agencies + ? External collaborators
- High TRL and low risk scheme
 - Need to pass the "technology screening"
- Dimension envelope
 - Fit in a cylinder of about 2m diameter
- Mass
 - Safely assume that we cannot go beyond Planck mission
 - COrE+ 2014: 1958 kg
- Power consumption
 - Will dictate if we need deployable solar panels or not (added risks)
 - COrE+ 2014: 2073 W
- Data rate
 - COrE+ 2014: 2.4 Mbits/s

Payload trade-off - Sub-systems cannot be treated independently

Size and configuration of the telescope

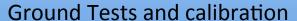
- No more than 1.5m diameter primary
- Rather 1.2m
- Cannot use CTR configuration

No HWP (at least as the first element)

(Cost, Dimensions & Mass)

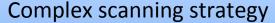
(Talk from S; Hanany)

Descope? Impact on Science?



Impact on in-flight calibration (Cost, Schedule, Risks)

(Talk from M. Bersanelli)



- Impact on solar panels size
- Impact on data transfer

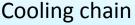
(Cost, Power, Data transfer)

(Talk from J. Delabrouille)

FPU and number of detectors Technology (EU)

(Cost, Power, cooling power, Data transfer, dimensions, mass, TRL)

> (Talks from this morning)



- Passive / active
- Choice: impact on signal,

(Cost, Power, dimensions, mass, TRL)

(Talk from Y. Pennec)

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