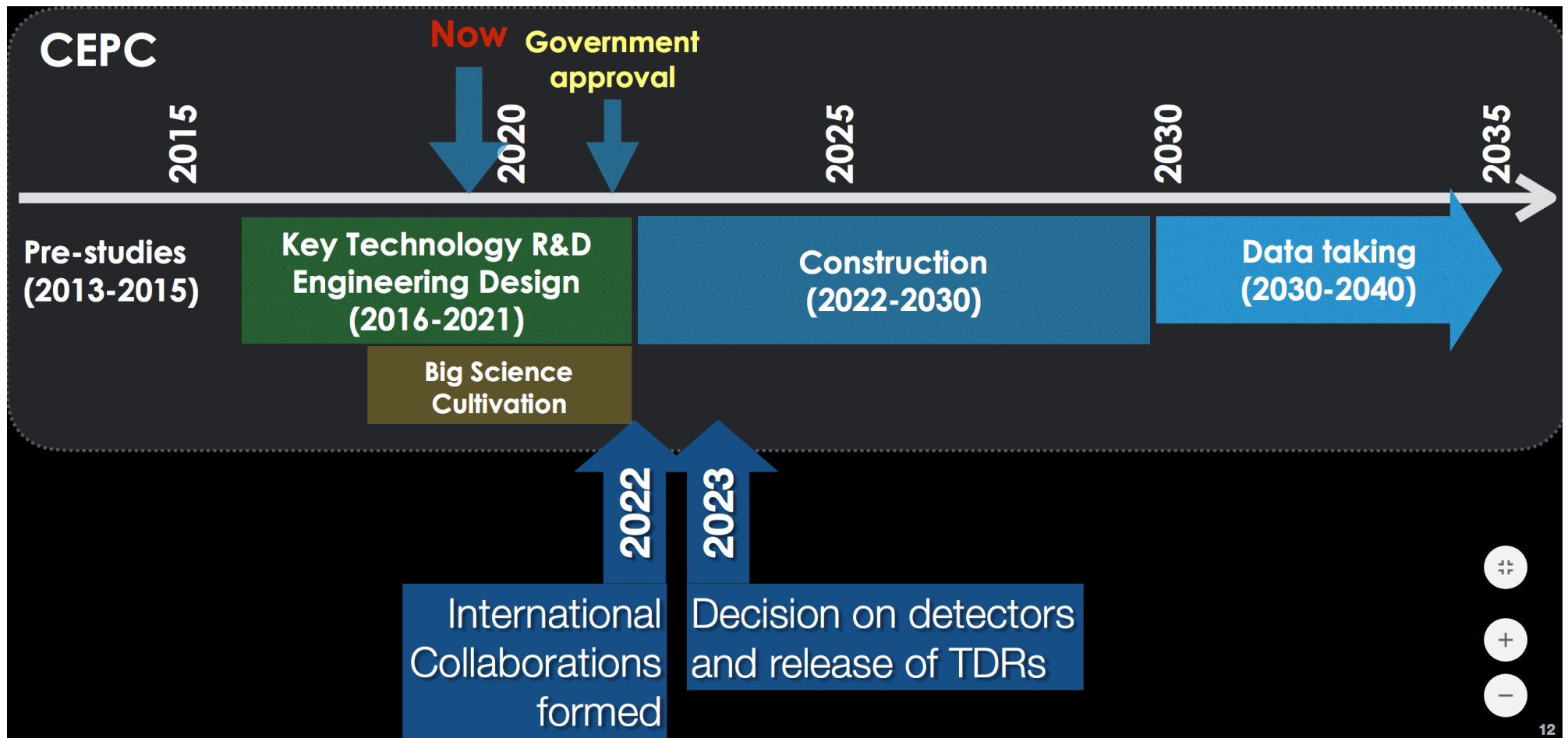# CepC timeline

IDRC report & DR project

Some points from IDRC which are of our interest

- It was not always clear from the presented material which R&D projects are close to the critical path for CEPC detector design, and which are longer-term or aspirational developments.
    - While DR calorimetry is quite well developed, current status of the project is still R&D level, a step forward to real experiment needs to be made
- The detector concepts presented in the CDR were illustrative and not aggressively optimised, and do not necessarily reflect the final combinations of sub-detectors that will be used in the final experiments.
    - This is contrast on Joao's approach, where "no name" should be given to proto-experiment
    - Many comments in interplay of detectors in the experiments have been made
    - Key points which require development of common simulation tool

IDRC report & DR project

- In general, the process of transition from generic R&D to concrete optimised CEPC detector designs is not yet fully mapped out. Adherence to an aggressive overall project plan will require this process to be understood in the coming year, and for a clear strategy for optimisation and selection criteria to be defined well in advance of the collaboration-building stage.

- A wide-ranging R&D programme should be maintained for the time being, though with the recognition that not all concepts under development will be mature on the time scale dictated by the overall CEPC schedule.

Comment on DR@CEPC workshop

- Session was under-attended due to superposition with IDRC meeting

- In general positive comments

- Critical comments on capability to build projective tower while maintaining constant sampling fraction and uniformity at tower junction

- Differences in the simulation performance results need to be clarified

DR in the CEPC schedule

- Within end of 2021 (two years from now)

    Key technology R&D - Engineering design

- (some) missing elements

    - Had-scale module (final demonstration of the DR performance)
    - Projective modules (to demonstrate we can keep it under control)
    - Engineering design of the calo (we don't know yet how to support it in an experiment. Real calorimeter will require cracks/non-uniformity/compromise on the "perfect GEANT 4 layout": how this would affect performance?
    - Scalable RO of the calorimeter: demonstration we know how to handle all the signals (→ cost needs to be kept under control)
    - "Official" simulation in the official(?) framework to asses performance studies
    - Enlarge the collaboration: parallel working is the way