1. Reminder of the proposed **detector configuration** for the use in the ePIC detector.

2. Input information:

- a. Pertinent information on similar technology/design that is used by other experiments or R&D efforts (example references could be literature or conference talks).
- b. **Prototypes and their tests**: done so far, ongoing effort, future planning (with timelines); results from prototypes and their tests
- c. Simulation studies: already performed, ongoing and planned (with timelines); results from the simulations; particular care in (i) showing how realistic the parameters used in simulations are and (ii) reporting what is missing for a fully realistic simulation (backgrounds, specific event categories, ...) (iii) Does the simulation take into account the realistic response of the selected photosensors and related FEE?

3. Performances:

- a. Comparison of the present assessment of the Cherenkov PID detector performance compared with the YR requirements?
- b. Performance perspectives beyond the YR requirements (if any)?
- c. **Efficiency** figures: single particle Pi/Kaon/Proton identified as Pi/Kaon/Proton as a function of the truth momentum in a 3x3-panel figure?
- d. Please quantify the performance for electron/hadron separation
- e. **Active area** or /dead area as 2D function of eta and phi; and comment on the edge effects?
- f. Performance or potential as timing detector, providing both timing resolution and acceptance coverage in eta and phi.
- g. Under the coordination of the SIDIS working group, provide Kaon Purity in the kinematic region of (x. .. Q2...) via parameterized hadron PID performance.

4. Aerogel Radiator

- a. Status of radiator selection
- b. Status of the radiator development and related potential issues?
- c. **Perspectives of radiator mass production** and timelines for the production period?

5. Sensors and FEE:

- a. Status of **photosensor selection** (a single consolidated option, more options under consideration); please provide photo sensor and pixel segmentation characteristics?
- b. Status of the sensor development and related potential issues?
- c. **Perspectives of sensor mass production** and timelines for the production period?
- d. Characteristics of the ASIC and FEEs considered?
- e. Status of **FEE identification** (a single consolidated option, more options under consideration)? Present a plan for realization on the FEE development in the context of technology choice and in conjunction with the project.
- f. Status of the **FEE development** and related potential issues?

g. Perspectives of **FEE mass production** and timelines for the production period?

6. Integration:

- a. Status of the proposed detector integration into the current baseline detector?
 - z-space and effect to tracking: in coordination with the tracking DWG, produce backward momentum resolution for the tracker that fit into the z-spaced allowed by the proposed RICH detector
 - ii. Material effect to backward EMCal: in coordination with the calorimeter DWG, produces electron lineshape in the backward EMCal with the proposed RICH detector in front.
- b. Status of the **design of the electrical/electronic infrastructure** (channels, power supplies, heat, rate)?
- c. Cooling strategies?

7. Workforce:

- a. **List of groups** engaged in the proposed detectors and of other groups potentially interested;
- b. Workforce needed with timelines and qualification of the required professional profiles; please, include also physicists needed for dedicated simulation studies:
- c. **Available workforce** (specifying: granted, expected, possible) by the groups proposing the detector;

8. Cost and scheduling:

- a. up-to-date cost estimate for the different components and expenditure categories;
- b. In-kind contributions (specifying: granted, expected, possible).
- c. Envisioned schedule for full scale production
- 9. Envisioned risk and risk mitigation strategy