



Detector-1 Conveners Meeting

June 17, 2022

Detector-1 Steering Committee

Silvia Dalla Torre, Or Hen, Tanja Horn, John Lajoie, and Bernd Surrow

Topics for this Introduction

- Some news from the SC
- More details on the consolidation/optimization roadmap
 - Developing the WG evaluations
 - WG recommendations to GD/I

EICUG Det1. Agenda

- EICUG Annual Meeting
July 26-30, 2022
 - Early Career meeting July 25th
- Detector 1 Dedicated sessions:
 - July 26th (half day), 27th
 - Scientific program focused on Det1
 - Be prepared for WG presentations
 - WG conveners are encouraged to attend in-person if possible
 - Collaboration formation:
 - IB Meeting Session
 - Open discussion on bylaws/charter

6/10/2022

2022 RH

Electron-Ion Collider User Group Meeting - 2022 CFNS, Stony Brook University, July 26 - 30, 2022

Detector-1 Meeting at EICUG Meeting July 26-27, 2022

Tuesday: July 26

- Tuesday morning Part 1: 08:30AM – 10:30AM – EICUG
- Tuesday morning Break: 10:30AM – 11:00AM
- Tuesday morning Part 2: 11:00AM – 12:30PM – Introduction Detector 1
- Tuesday Lunch: 12:30PM – 02:00PM
- Tuesday afternoon: 02:00PM – 03:30PM WG part 1 (Detector)
- Tuesday afternoon Break: 03:30AM – 04:00PM
- Tuesday afternoon: 04:00PM – 05:30PM WG part 2 (Detector)

Wednesday: July 27

- Wednesday morning Part 1: 09:30 AM – 10:30 AM – [IB meeting](#)
- Wednesday morning Break: 10:30 AM – 11:00 AM
- Wednesday morning Part 2: 11:00 AM – 12:30 PM – IB meeting
- Wednesday Lunch: 12:30 PM – 02:00 PM
- Wednesday afternoon: 02:00 PM – 03:30 PM WG part 3 (Physics)
- Wednesday afternoon Break: 03:30 PM – 04:00 PM
- Wednesday afternoon Part 2: 04:00PM – 05:30PM GD/I Detector-1 Summary & Discussion

Note: No parallel session since the focus of the meeting is the formation of a new collaboration!



Vision of Collaboration Forming Process

□ Vision for a collaboration forming process:

- Institutional Survey: Next slide!
- Formation of a ~~prelim. IB~~ (inst. representatives)
- Nomination & Formation of Bylaws/Charter Committee
- Formulation & Adoption of Bylaws/Charter
- Nomination & Election Process of Detector 1 Leadership

Elected at the same time!

- Finalization of IB and Election of IB Chair
- Election of Spokesperson(s)

EIC Detector 1 Institutional Survey Form

Timescale:

Done

ASAP

Now -> JULY

EICUG Meeting (and after)

Set by adoption of bylaws – perhaps Sept/Oct?

This form was created inside of Temple University. Report Abuse

Google Forms

From 5/13 – B. Surrow presentation

Goal is to expedite the formation of the collaboration with elected leadership!



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Many more details to follow at June 24th General Mtg.

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EIC Detector 1 Institutional Survey Form

Timescale:

Done

(and after)

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- Let us make this perfectly clear:
- The SC is completely united in the goal to realize the EIC detector and the EIC science program.
 - Do we disagree on the details of how to do that? Sure.
 - Do we have an effective, working relationship that is based on mutual trust and respect? **Absolutely!**

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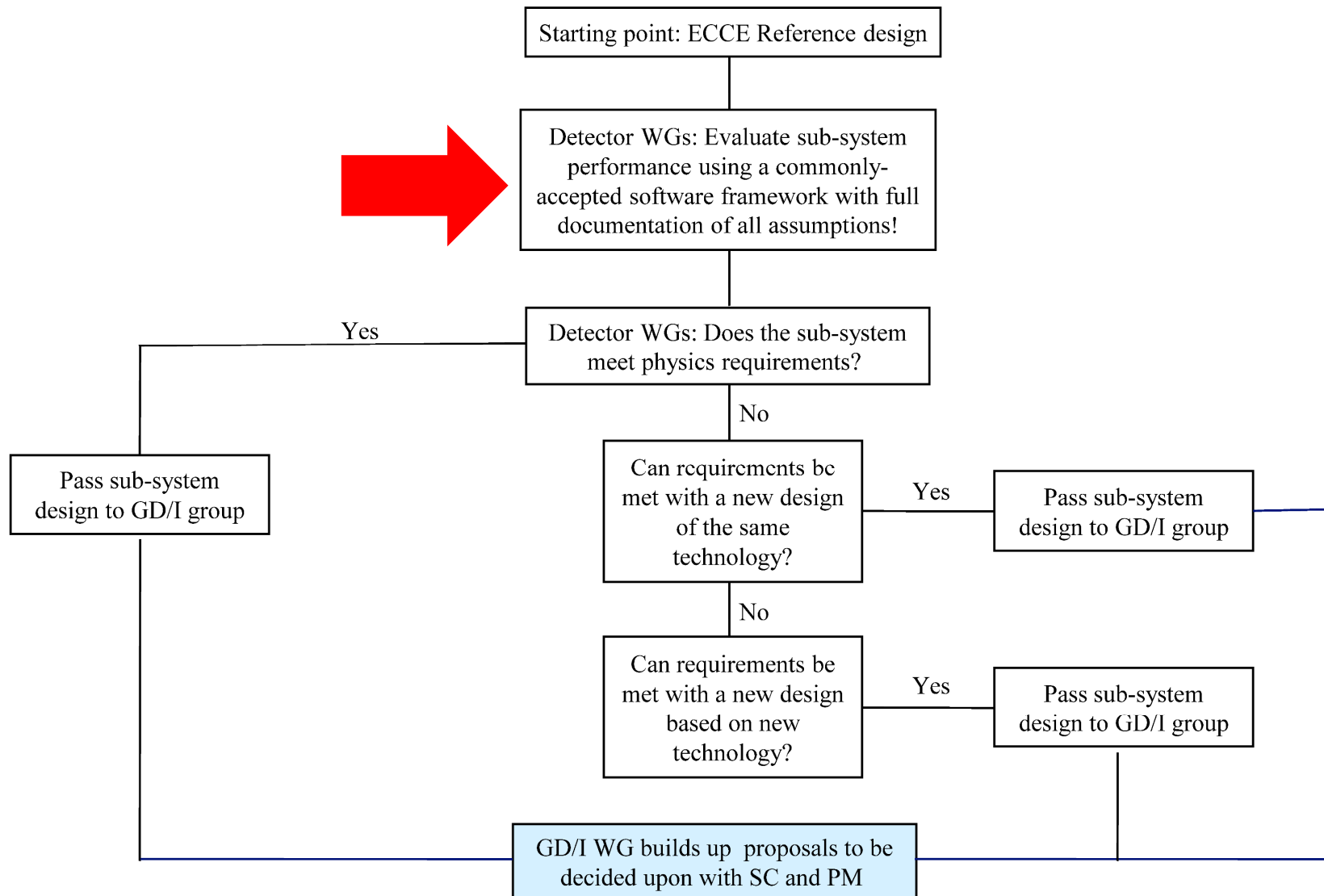
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 - Do we have an effective, working relationship that is based on mutual trust and respect? **Absolutely!**
- A lot of the gossip that has been reaching us is unhelpful at best, damaging at the worst.
- If you have an issue with how things are going in Detector-1, engage with the SC (the whole SC)

ISMD 2022 Opportunities

- July 31-Aug. 5th
Pitlochry, Scotland
- Two abstracts previously submitted on behalf of Detector-1
 - “Prospects for TMDs and GPDs with Detector-1 at the EIC”
 - “Prospects for Spin Structure of the Nucleon with Detector-1 at the EIC”
- Accepted for one 20min talk, one poster/flash talk
 - Division of material is left to our discretion
- Seeking speaker nominations
 - Self-nominations OK, keep WG members are career-vulnerable in mind



Consolidation Roadmap: Detector WGs



4 From 6/3 –
S. Dalla Torre
presentation

How do we move to a specific implementation for key items of consolidation for Detector-1?

Start by **enumerating the key consolidation/optimization items** for each WG.

This list then informs a detailed **work plan** of R&D, simulations, and physics performance studies.

Request from WG's for this meeting:

- A summary of the key items/open issues in the consolidation/optimization effort within your WG
- What are the resources needed to address these issues? In addition to R&D and simulations, please highlight any additional resources that will be required. Are there missing resources or information the SC should be aware of?
- What are the timescale(s) for resolution? What drives the timescale(s)?
- How are the Physics Working Groups integrated into your detector working group efforts?

Request from WG's for this meeting:

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- What are the requirements to R&D and simulation that will be required? In addition SC should be aware of the resources and information the
- What are the timescale(s)?
- How are the Physics working groups integrated into your detector working group efforts?

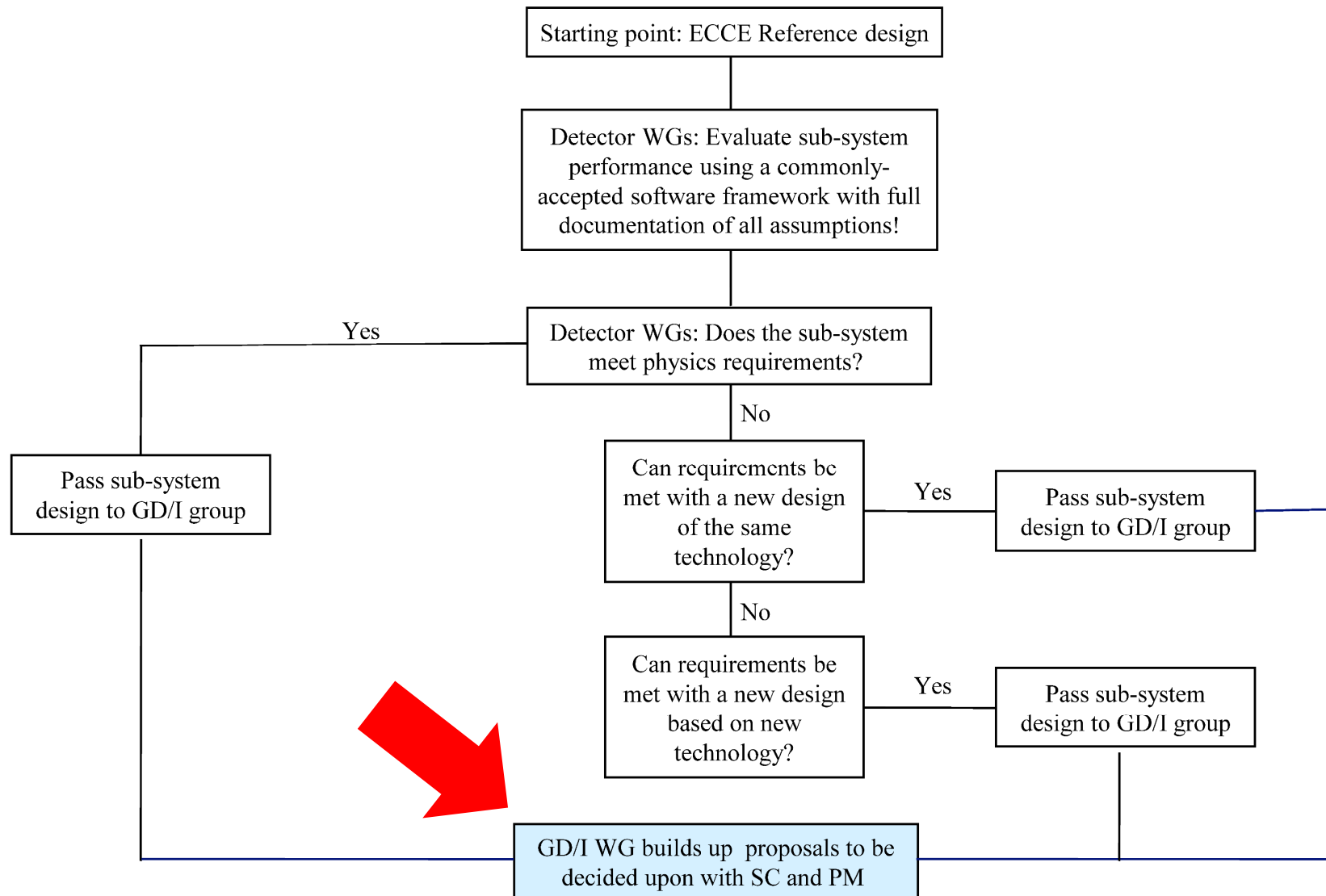
Help us be more helpful to you

What is missing from this?

How can we help in organizing the process?

Are there resources or communication that you need?

Consolidation Roadmap: Detector WGs



4 From 6/3 –
S. Dalla Torre
presentation

What information does GD/I need from the working groups?

Consolidati

From GD/I email to Calo WG: (6/11/2022)

...we request from you some specific points of information:

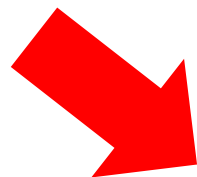
- Details on the work done to provide the necessary input for your decision making process. This includes both collection of existing information and any new studies your WG initiated to establish the expected system performance.
- The full pro/con list that was used to inform your recommendations. This should include any and all considerations that helped the WG form your recommendations.
- A presentation of your recommendations and reasoning for them based on the information presented in the points above.
- Your view of how these recommendations fit with the global detector. e.g. did you ensure the system fits within the geometrical constraints.
 - Have you considered how service routing might work?
 - What is the assumption of performance and material distribution of other subsystems that were relevant for your study?
 - Do you see any potential challenges integrating your recommended solution within the global detector?
- Further, we would like to see simulations that validate the performance of the proposed configuration.

6/3 –
la Torre
ntation

does GD/I need
groups?

Yes

Pass sub-system
design to GD/I group



Today's Agenda

These meetings should concentrate on the details/issues/problem-solving associated with the consolidation/optimization process.

Looking for first iteration with tracking, Cerenkov PID, far-backward, and far-forward.

WG Convener Meeting
Friday Jun 17, 2022, 9:30 AM → 11:45 AM US/Central

Description **Connection Information:**
Please click this URL to start or join. <https://iastate.zoom.us/j/93468095976?pwd=ZFZyTDRwaUhuYXFJTllyVys3OWtxUT09>
Or, go to <https://iastate.zoom.us/join> and enter meeting ID: 934 6809 5976 and password: 211496

9:30 AM → 9:40 AM **Introduction** 10m
Speakers: Bernd Surrow (Temple University), John Lajoie (Iowa State University), Or Hen (MIT), Silvia Dalla Torre (INFN, Trieste), Tanja Horn (Cath)

9:40 AM → 11:10 AM **WG Conveners**

9:40 AM **Tracking** 20m
Speakers: Francesco Bossu (CEA-Saclay), Kondo Gnanvo (University of Virginia), Laura Gonella (University of Birmingham), Dr Xuan Li (Los Alamos National Laboratory)

10:00 AM **PID Cherenkov** 20m
Speakers: Grzegorz Kalicy (CUA), Roberto Preghenella (INFN Bologna), Thomas Hemmick (Stony Brook University), Xiaochun He (Georgia State University)

10:20 AM **Far Backward** 20m
Speakers: Igor Korover (MIT), Jaroslav Adam (BNL), Krzysztof Piotrkowski (AGH UST), Nicholas Zachariou (University of York)

10:40 AM **Far Forward** 20m
Speakers: Alexander Jentsch (Brookhaven National Laboratory), John Arrington (Lawrence Berkeley National Laboratory), Michael Murray (The University of Kansas (US)), Yuji Goto (RIKEN)

11:00 AM **Sim & QA Report** 10m
Speakers: Joe Osborn (Oak Ridge National Laboratory), Wenliang Li (Stony Brook University CFNS), Wouter Deconinck (University of Manitoba), Zhoudunming Tu (BNL)

11:10 AM → 11:40 AM **Q&A**

11:20 AM **Q&A** 20m
Speakers: Bernd Surrow (Temple University), John Lajoie (Iowa State University), Or Hen (MIT), Silvia Dalla Torre (INFN, Trieste), Tanja Horn (Cath)