ILD costing for DBD

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New CTG on costing under the patronage of the research director S.Yamada

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Update the cost estimate of the two detectors, SID and ILD, in view of the 2012 DBD .

IDAG advises that the 2 detector groups make their cost estimation in the same way, consistent and shown in a directly comparable form.

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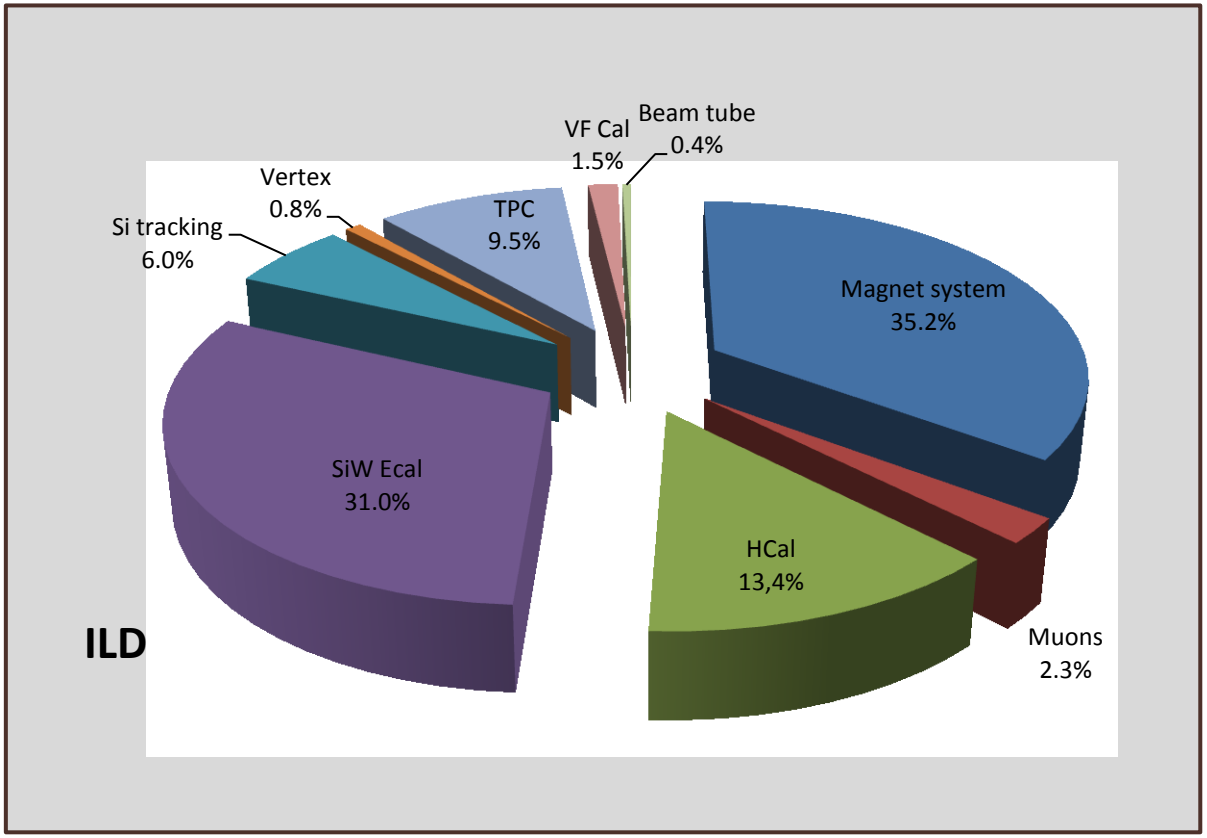
- ***Update*** of the work already done for RDR in 2007 with the three concepts: GLD, SID , LDC.

- The aim is ***not to make a cost comparison*** between the two concepts but to give confidence in the estimate provided by each of the concept.

- It can be mentioned that M.B & H.V are involved in the CLIC detector costing group, CDR by the end of 2011.

Driver costs

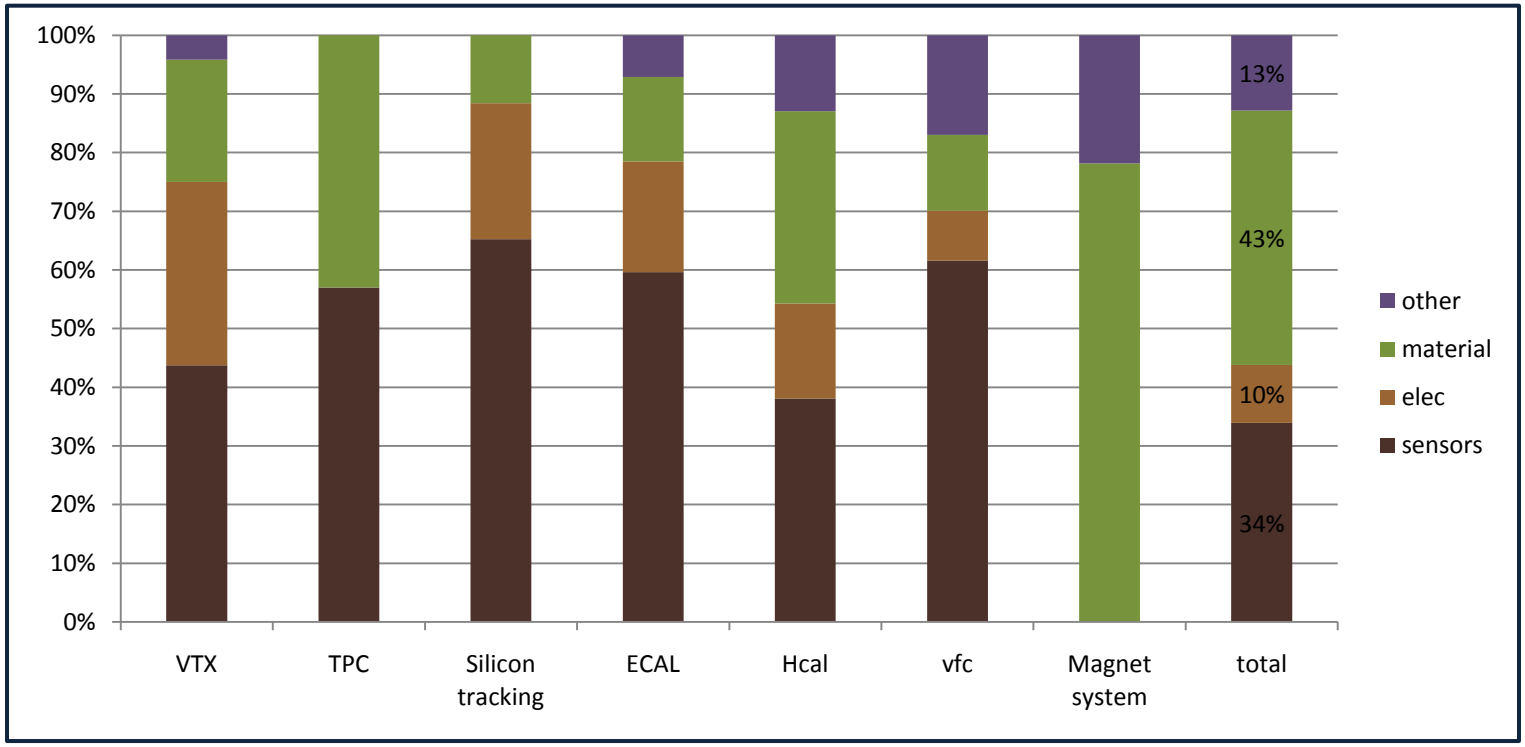
The price is completely dominated by few items. The idea is to focus on the main cost drivers without forgetting that the sum of the smaller contributions may be huge:



Driver costs

Try to agree on common pricing for driving cost materials :
W, Fe, SS, Silicon

Not trivial as it depends on the tolerances and on the machining specifications.



Manpower

Try to agree on a common way to handle the manpower since this is highly dependent on the region and on who does what.

- ***In house Manpower :***

Common way to handle the in house manpower (probably in MY, maybe divided in cost categories).

- Agreement on ***separate estimation*** *of the manpower* as we don't know yet what will be in house and what will be in the industry .

Keeping in mind that for cost drivers (for example Calo) due to numbers of channels the industrial MP won't concern only the **fabrication** but also **part of assembly and test** will have to be externalized**.**

R&D & Co

- Cost won't take into account R&D , except ***R&D directly in view of industrialisation***. Therefore the cost of what we do now is likely to be out of the scope.

But since 2006

- All the R&D groups has evolved from ***physical to technological*** prototypes , so they might be able to provide a much ***more exhaustive estimate*** of the material prices and the amount of manpower needed for a true detector realisation.

+ new development on ***integration and MDI issues*** that help to estimate interfaces, assembly and services costs.

DBD 2012

The estimation has to be much more comprehensive than what was previously done, even though we see clearly the limits of the exercise.

In view of the 2012 DBD:

Sub-detector groups will be asked to provide their best estimates in time for a cross examination inside ILD but also between detectors. This time is clearly somewhere in the first half of 2012.

DEADLINE !!!!!