

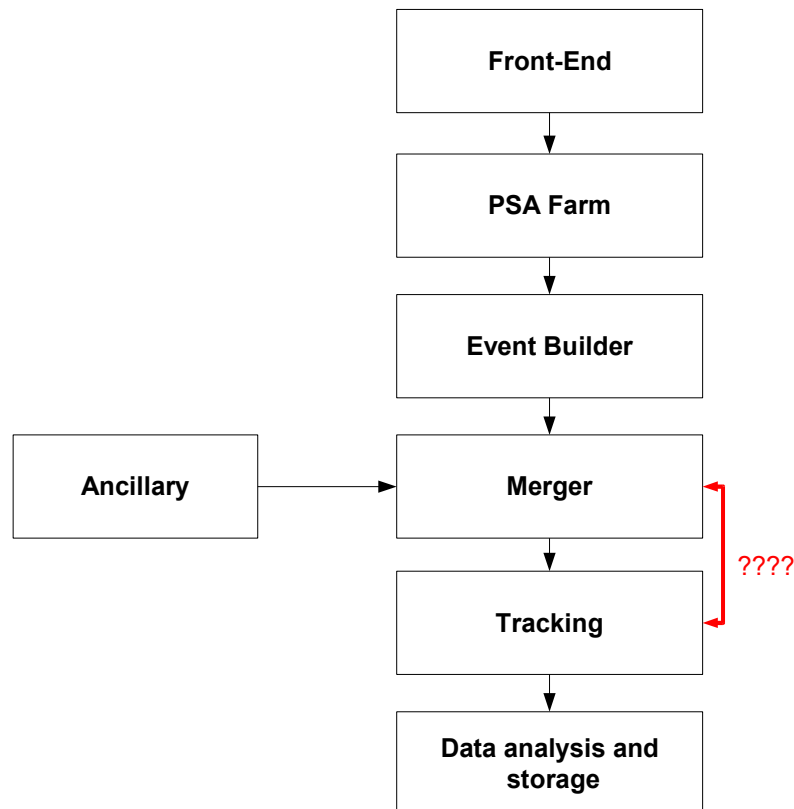
# Agata Data Flow & Ancillaries Integration

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ORSAY

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The goal of the meeting is to define a unified data format for AGATA and ancillary detectors. Indeed, the Agata analysis farm has to deal also with ancillary detectors. One should therefore avoid uncontrolled growing data format collection.

The meeting starts with a description of the Data Acquisition architecture and where the ancillaries should be integrated.



After discussions, it appears it might be better to merge data coming from ancillaries before the tracking:

- It does not affect the AGATA data flow
- It allows to add a soft trigger depending on the ancillaries
- It anticipates possible future tracking algorithms that might use informations coming from ancillaries (although the tracking teams does not require such information with present algorithms).

Contrary to EUROBALL, there is no « buffer-like » structure for the Data flow (data are stored on disk not on tape ...). **It is then described as an event stream.**

...[new event](event header)(AGATA)(ANCILLARY\_1)(...)(ANCILLARY\_N)[new event] ...

Each sub-event (AGATA, ANCILLARY\_1 ..) having a unique ID:

Example: 1 for AGATA, 2 for VAMOS etc ... (*should we also think now about a revision number ???*)

The structure of the sub-event for ancillaries should be as simple as possible, like:  
(ADC Number, ADC value).

A buffer service (see below) or an Xml file that describes the data structure could be a solution. However it should stay rather simple, like: (ADC Number, ADC Name).

If the ancillary detector do not adopt this format, it is agreed that is should provide his own package into the Agata data analysis framework.

One has to be careful to not increase too much the data flow with a too verbose format. However, it is pointed out that ancillaries reduce the data rate by at least a factor 10.

**Special events must be included in the event stream** to notify any important modifications during the running time. For instance a NewRun event must be provided to indicate a new run. As well, such events could give informations about the data structure of ancillaries, should provide a table giving a mean to all ADC# ...

Action:

A document that summarizes what is currently done (or has been done) must be written. It should include the adopted solution for EUROBALL, GANIL, PRISMA ... and a proposal for an unified agata ancillary detector format.