Topics discussed in the March 15th meeting and DRDT 7.6 "added-value":

Coordination 7.6: Marlon Barbero (CPPM), Iain Sedgwick (STFC), Walter Snoeys (CERN)

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- Schematically:
  - **1st area**: Smaller-scale prototyping, exploring novel concepts, delivering proof-of-principle demonstrators ... these activities do not necessarily lead to large scale production, can be exploratory (→ not in DRDT 7.6).
  - **2nd area**: Common generic developments, complex design flow, negotiated access to technologies with industrials, ... common community effort, not exploratory (→ in DRDT 7.6).
  - **Joint body** to avoid parallel or conflicting proposals, to enhance readability of our work (no overlap, no duplication of efforts ...)? Yet efficiently organize work in our community.

- Topics discussed in the March 15th meeting and DRDT 7.6 "added-value":
  - **Tools and support**:
    - Digital on top flows are becoming increasingly common. But steep learning curve & there are few experts. Verification of designs becomes also clear issue.
    - Potential bottleneck with computing infrastructure. Computing demands vary considerably throughout project's lifetime. Particularly difficult for smaller institutes to maintain required infrastructures.
    - Foundries often insist on single point of contact. Supporting queries and PDKs for a wide community can be a significant burden.

- <u>Topics discussed in the March 15th meeting and DRDT 7.6 "added-value"</u>:
  - **Foundries**:
    - <u>Close relationships with foundries are critical</u> and must be maintained at all costs (mentioned in every talk). Large production volumes (ITS2 production, >200 wafers with TSI) can help convince foundries we are viable partners. This argues for <u>funneling production through single point of contact</u> (or a few), which is something foundries insist on anyway to reduce their support burden.
    - <u>Flexibility from foundries</u> useful when trying to implement new processes. <u>How and when to approach them</u> is a critical point. If at all possible, relationships should be sought to foundries prepared to provide flexibility (and community should be made aware of this).
    - Issue of <u>confidentiality of foundry data</u> is very serious one. Challenge is that data must be protected following foundry rules, though at same time providing access to distributed group of institutes. TCAD data handling especially sensitive as highly confidential.
    - Building relationships with foundries takes years, but <u>relationship can be rapidly damaged</u> if point above breached.
  - **Other points**:
    - <u>Most large project build on developments gone before</u> - ITS2/3, MightyPix, MuPix, ATLASPix family etc etc…- and also strong relation between unrelated developments in different technologies (they demonstrate what is possible)
    - <u>Several technologies</u> repeatedly mentioned, and are <u>likely to be of considerable importance over the next years</u>:
      - Stitching
      - 3D integration and wafer stacking

A final point: Note that a proposal is being worked on (drafted by F. Vasey / D. Newbold), discussed in particular across DRD3 – DRD7