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Some thoughts on the AIR Data Net implementation

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05/2018

Some facts (do you agree?)

- Today, conducting top – notch research without advance computing & massive data management is almost **impossible**.

- From the policy making point of view, it makes no sense trying to have all the facilities available in every country, region, city... **Sharing is the only way**.

- Another good idea is to **leverage the existing facilities** and generate strong scientific impacts with only a small amount of money on top of.

- The AIR Center is an extremely good opportunity to build a **new large – facilities alliance**, and be able to address new and ambitious scientific challenges.

Let's go to work

1. In the AIR Center framework, we have some institutions with a remarkable expertise on managing large computational facilities.

2. We also have experience in opening this facilities to users outside our own center. We talk about BSC, LNCC, TACC, MACC, etc.

3. Because of the last investments, some of us (BSC & TACC maybe? Any others?) are able to think of devoting a small part of our machines to strategic projects like AIR. Both on computing and storage.

4. This seems a very good starting point to build something real, that can be useful to all partners: to those that don't have large computational facilities, because it'd guarantee the access to these facilities; to those that already have these facilities, because the scientific cooperation.

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Trying to be concrete

1. Being more concrete: on the computational side, we could think of creating a "virtual AIR machine" by adding computational time from our machines, and devoting this "virtual machine" to proposals coming from institutions from all the AIR-members countries. Suggestion: always following some type of competitive procedure.

2. On the "data side", the demands will be different: not having access to a machine for some month, but having guaranteed the storage for the long-term, with a layer of "services" on top of that, becoming the data fully accessible for all the members of the project.

3. We need to create an operative working group to, at least:

   1. Identify the available facilities.

   2. Identify the needs of the future users.

   3. Identify the strategic projects (specially on the data site).

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Thank you

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05/2018