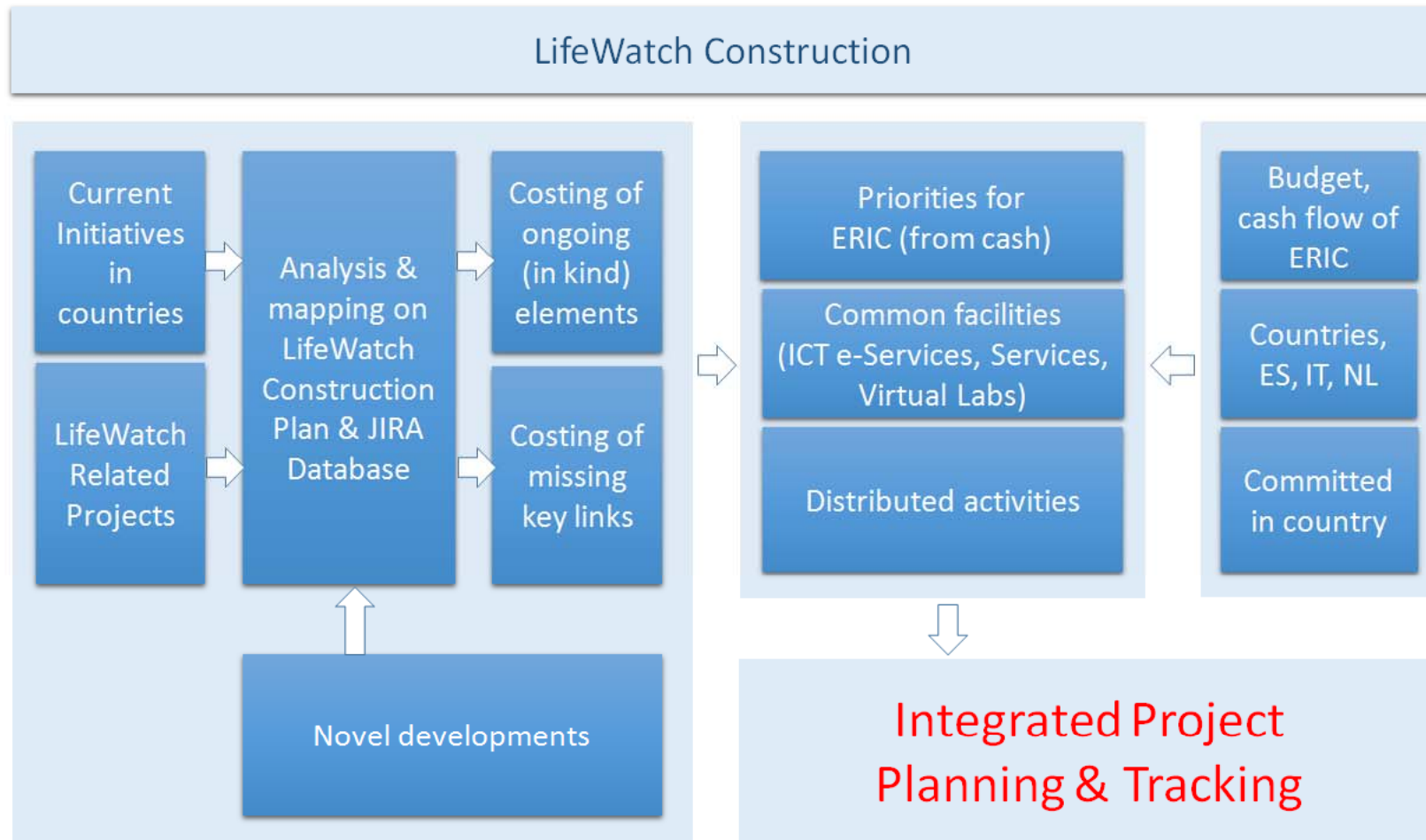# *Understanding Application Requirements*

*Working meeting LifeWatch Virtual Labs*
*Amsterdam, 19-20th March*
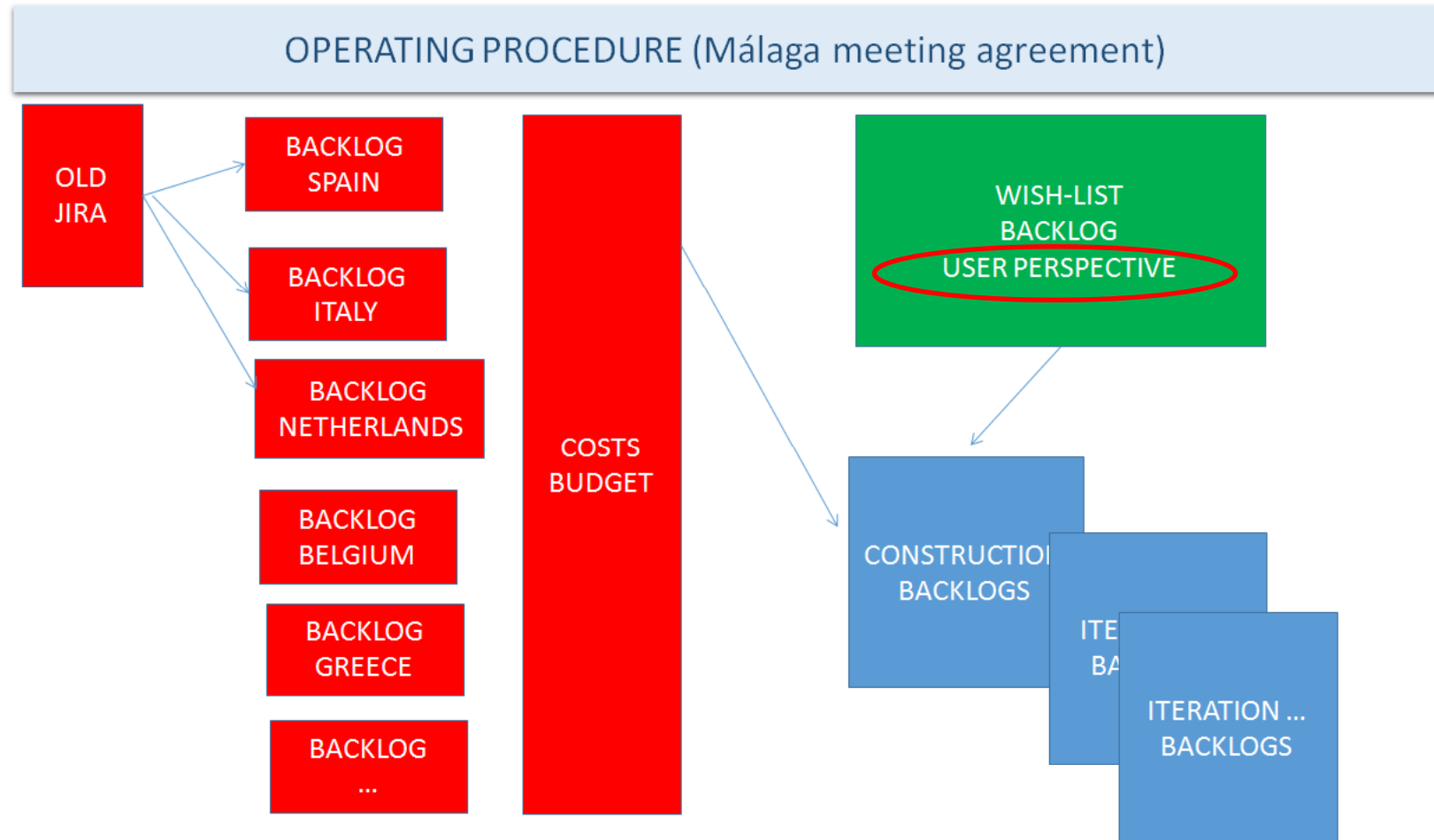
**A contribution of the LifeWatch IC³ Working Team**

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Universidad de Cantabria- CSIC

SANTANDER, SPAIN

# *Málaga meeting:*
## *Advancing towards construction*

# *A well defined operating procedure*



OPERATING PROCEDURE (Málaga meeting agreement)

OLD JIRA

BACKLOG SPAIN

BACKLOG ITALY

BACKLOG NETHERLANDS

BACKLOG BELGIUM

BACKLOG GREECE

BACKLOG ...

COSTS BUDGET

WISH-LIST BACKLOG USER PERSPECTIVE

CONSTRUCTION BACKLOGS

ITERATION BACKLOGS

ITERATION ... BACKLOGS

# *The communication problem*

- As "ICT", we have procedures to consider, support, track requirements using a project management tool (*from User Stories to Backlog items*)

- But... our "final users" are not "ICT", in fact, we work in a complex ecosystem

    *(More complex in reality than what we can try to model)*

    - We may have a basic layer with ICT-infrastructure experts
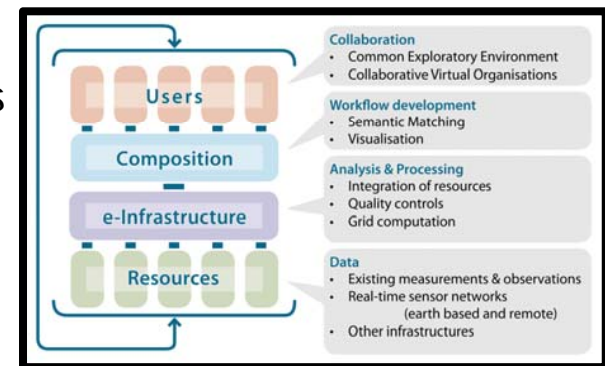        - They don't know much about applications
    - A middle layer with ICT data/modeling experts
        - They know about applications
        - They may do research, they usually do not write the papers
    - A "final-user" layer with researchers
        - They want to use the applications, they provide the knowledge to write them, they usually write the papers

- The three layers need to communicate/cooperate:
    - The two first layers can talk "ICT" between them, the last two, not!
    - A "mixed profile" expert is of course a very good solution.
    - But, how can we "annotate" this communication, even if internal?
    - This is a key question for VRE, and in particular for VLABs
    - And the first key communication is on **"requirements"**

*Let me insist: we "know" how to do it for "ICT"*

# *Identifying requirements, initial ideas*

- Can we (we=researchers) **PLAN Case Studies** in a "well defined" way?
  *(and not ICT like)*
  - Forms in simple language, maybe common vocabulary (of research area)
  - A pre-defined but simple scheme, incorporating some items to be able to answer
    - Scope (of the Case Study or eventually of a project)
    - "DPM" issues (the data chain)
    - Data processing/Modeling/Visualization issues...

    > Like an extended version of the EXCEL, with more details and options

- then can we (we=ICT middle) re-write it into ICT form, identify the requirements...and define components, applications and re-use of existing components, and complete the form at this level and...

- then can we (we=ICT infrastructure) take into account those requirements, and complete the form at this level and...

- ...and then make a first iteration back to the researchers, and complete a first **SOLUTION proposal where all the ICT requirements (infrastructure, e-services, etc) are identified**

  <span style="color:red">YES, WE CAN, but... we need PEOPLE/TEAMS</span>

# *Joining resources*

**and this is a point where EGI-Engage LW CC can *help***

## What is a Competence Centre

- Knowledge is distributed and is more effective when joined up and shared
- The CC brings together
  - User communities
  - Technology providers
  - Service providers
- For
  - Technical development
  - Training, support, community building

2/26/2015
EGI-InSPIRE RI-261323
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8
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# *Now for VLABs...*

- Analogy: Vlabs as software libraries
- Can we (we=researchers) **PLAN** **Case Studies** in a "well defined" way that **gave origin to our VLABS**?     *(and not ICT like)*
- then can we (we=ICT middle) re-write it into ICT form?
- then can we (we=ICT infrastructure) take into account those requirements, and complete the form at this level and...
- ...and then make a first iteration back to the researchers, and draft back a **SOLUTION proposal where all the ICT requirements (infrastructure, e-services, etc) of the VLAB are identified?**

<p align="center"><strong style="color:red">PROBABLY NOT!</strong></p>

- Can we do it for a few (most interesting/relevant) examples? **MAYBE!**
- **Can we do this effort at such a level that VLAB components are then useful, as e-services, for new applications? (as software libraries are?)**
- **Can then we integrate in the process of identifying the requirements for applications, the (re) use of VLABs components?**

<p align="center"><strong style="color:red">YES, WE CAN, but... we need MORE PEOPLE/TEAMS</strong></p>

# *Almost the last slide...*

- If we want to offer the best possible support to researchers, we need the best computers

- The best computer for general purpose, as of today, is not a GPGPU supercomputer, it is the human brain

- On the other hand, communication between these computers is not trivial nor effective many times, given their different training

- A key example is finding and composing the best solution on an e-infrastructure for a given application of a team of researchers

- We propose:

  - to setup a clear path for identifying requirements and defining solutions, involving all different actors in a defined way

  - incorporate VLABs into this chain as possible, with the involvement of the experts/responsible, to define e-services

  - Coordinate this effort to the e-infrastructure through the LW CC

# *Our next, and key, step:*

## Engage LifeWatch distributed nodes

| LW DISTRIBUTED E-INFRASTRUCTURE | |
|---|---|
| **COMMON** Facilities | **"DISTRIBUTED"** Facilities |
| • **Nicola Fiore (Service Centre)**<br>• **? (Inno Labs)** | •**Francisco Hernández** (Belgium)<br>•**Christos Arvanitidis** (Greece)<br>•**Rest of countries** IC$^3$ contact points |

⬡ WE NEED YOUR COLLABORATION

⬡ WE APPRECIATE YOUR SUPPORT (AND PATIENCE)

## Many thanks!