

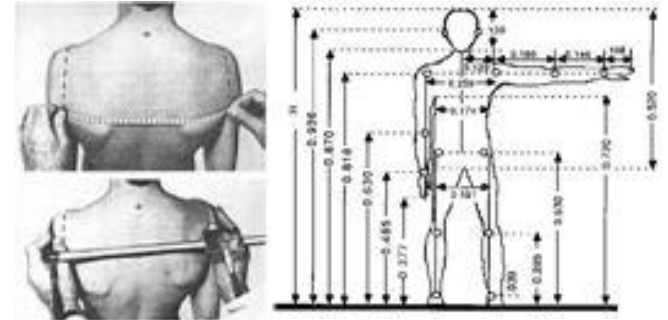
EUROFIT

Integration, Homogenisation and Extension of the Scope of Anthropometric Data Stored in Large EU Pools

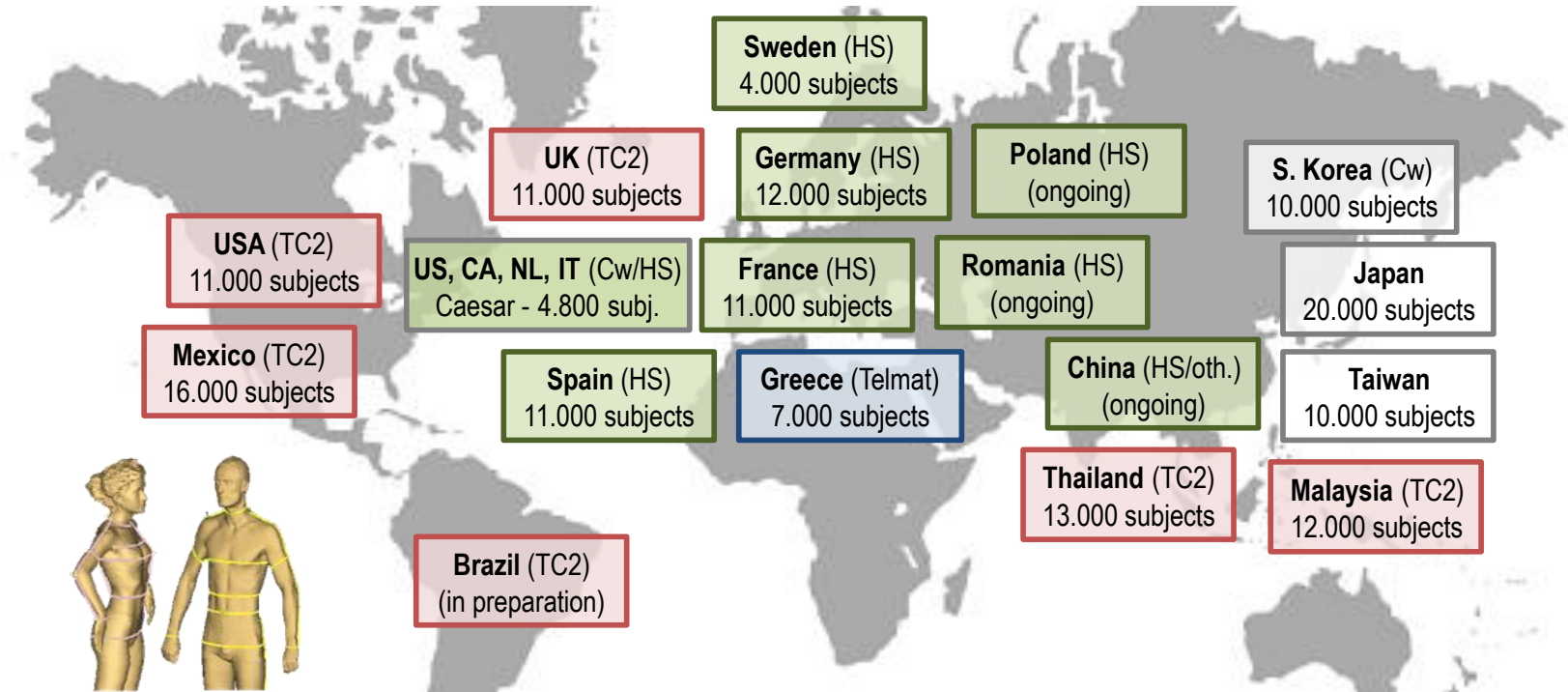
*Juan Carlos González
Instituto de Biomecánica de Valencia*

EUROFIT VISION: EXPLOIT HUMAN 3D DATABASES

- Over the last decades, **human body metrics** have been used to **improve human-product interaction**.
- The use of **1D-measurements** has been **extended to consumer goods industries**.
- New technologies for gathering anthropometric data (3D scanners) **have increase the availability of digital anthropometric resources**.
- Since 2000, over 16 **large-scale national 3D body scanning surveys** have been conducted.



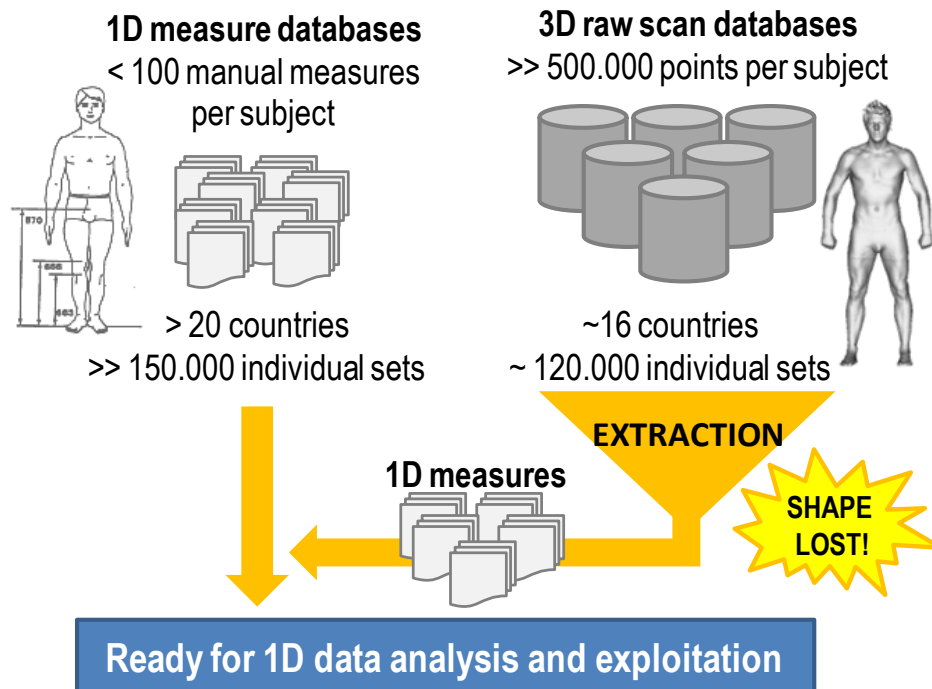
EUROFIT VISION: EXPLOIT HUMAN 3D DATABASES



“EUROFIT vision is to exploit the huge potential contained in the increasing number of databases of 3D body scans for the European consumer goods’ industries”

EUROFIT VISION: EXPLOIT HUMAN 3D DATABASES

However, these 3D data pools are dispersed and heterogeneous. Furthermore, only 1D information is used because exploiting shape information is complex for SMEs.



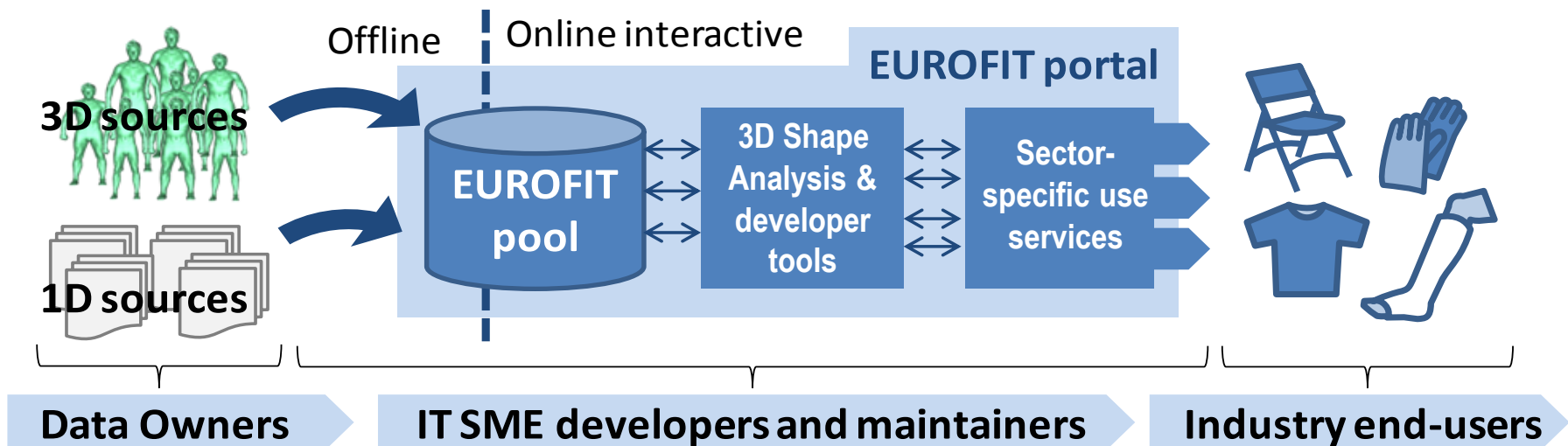
LIMITATIONS

- **Information losses.** The 500.000-point meshes are being compressed to less than 100 measures.
- **Limited reliability** when linked to product design tools (e.g. 2D/3D CAD, CAM).
- **Pre-defined sets** which are only useful for the applications they were developed for, e.g. apparel.
- **Limited cross-data analysis** of heterogeneous sources since only similar measurements can be comparable.

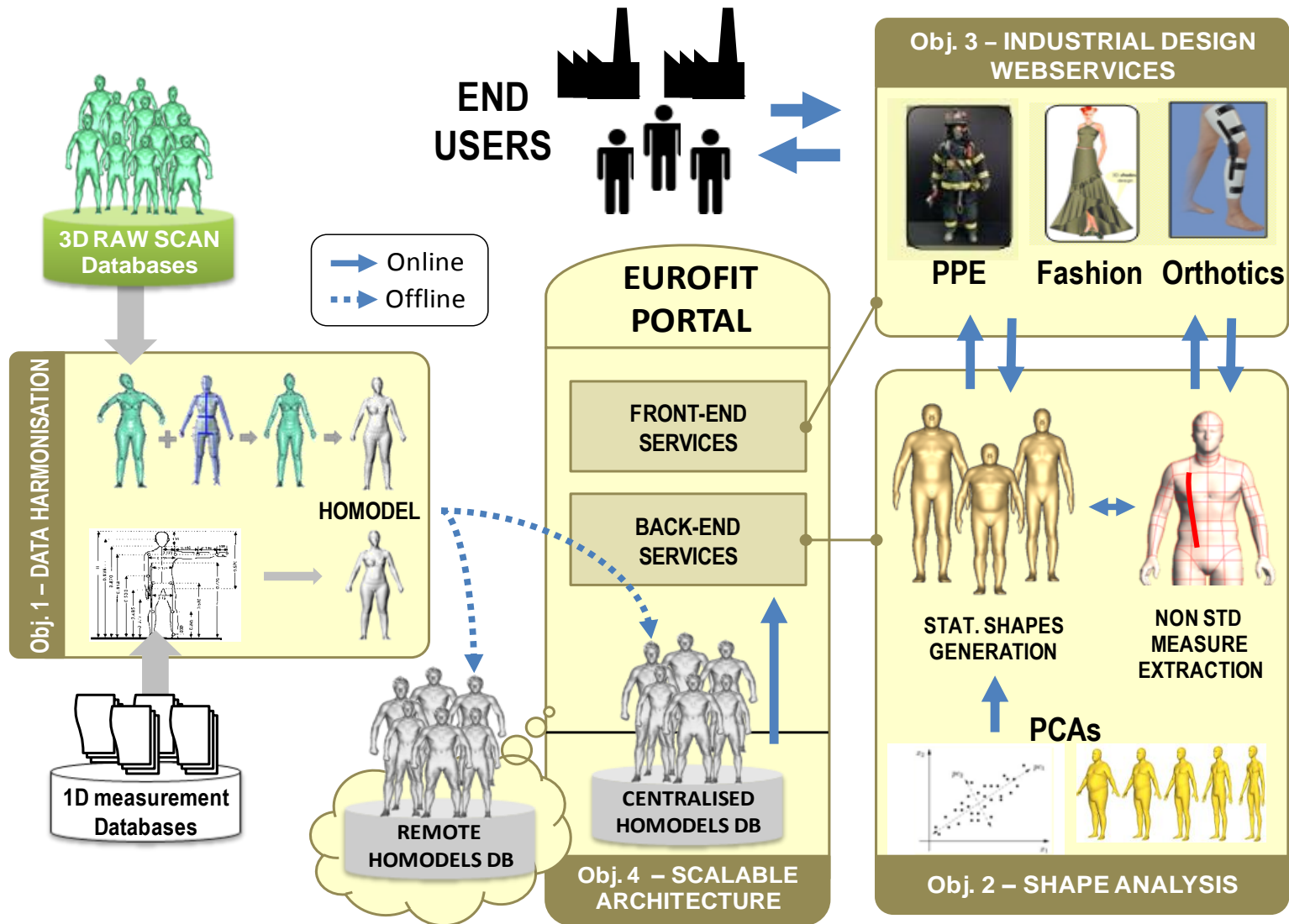
GENERAL OBJECTIVE

Our **overall aim** is to implement the **EUROFIT online platform** enabling:

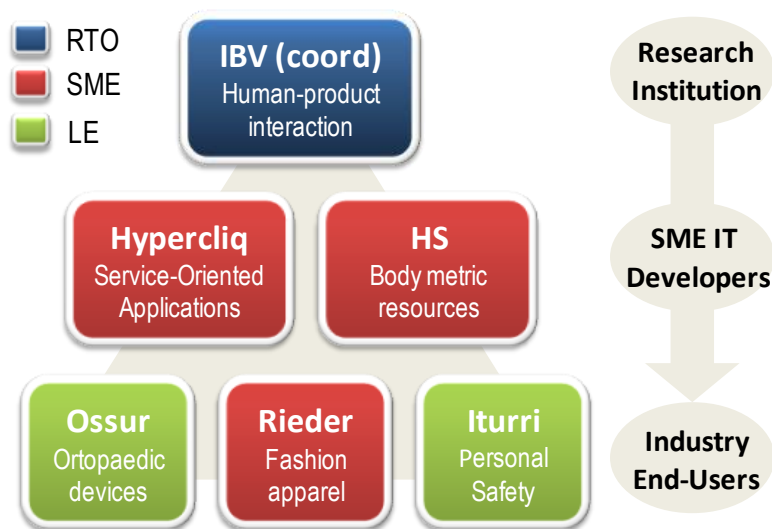
- **Single point access to international body shape information.**
- **3D shape data analysis tools.**
- **Sector-specific tools to introduce shape information into product design.**
- **Open framework** allowing the **development of new applications**, promoting the extension and upgrade of the portal services by IT SMEs.















SPECIFIC PROJECT OBJECTIVES



CONSORTIUM



| Logo | Participant organisation name | Short name | Country | Type |
|---|--------------------------------------|------------|---|--------------|
|  IBV | Instituto de Biomecánica de Valencia | IBV |  Spain | RTO |
|  | Human Solutions GmbH | HS/Assyst |  Germany | IT SME |
|  | Hypercliq Florendia Fourli &Co | Hypercliq |  Greece | IT SME |
|  | Össur hf | Ossur |  Iceland | LE end-user |
|  | Iturri S.A. | Iturri |  Spain | LE end-user |
|  | Schrittenloher GmbH | Rieder |  Germany | SME end-user |

EUROFIT EXPLOITATION

SELF-SUSTAINABILITY

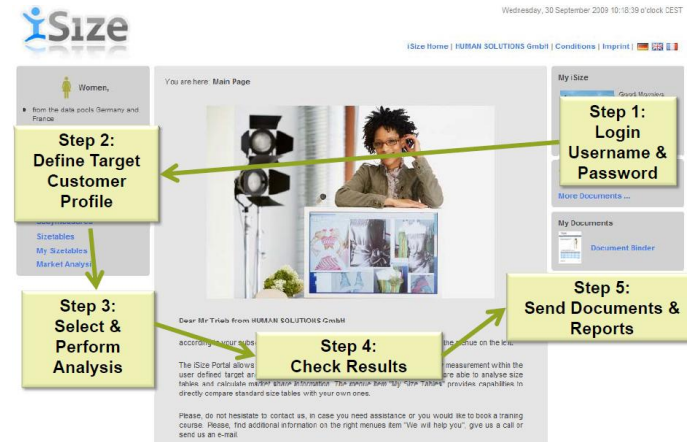
- Four-month **demonstration activity** by industrial end-users
- Aggregation of **four national databases** before the end of the project

SOLID BUSINESS MODEL

- Exploitation will be **based on the Business Model of iSize**
- EUROFIT is conceived from a **wider, more scalable and cross-sector** approach

SME-DRIVEN

- New forms of partnership involving the **whole value chain**: end-users, data owners and IT providers
- **Reduce time, cost and complexity** of 3D data integration into industry



THANKS FOR YOUR ATTENTION

MORE INFORMATION:

JUAN CARLOS GONZÁLEZ

INSTITUTO DE BIOMECÁNICA DE VALENCIA (www.ibv.org)

juancarlos.gonzalez@ibv.upv.es