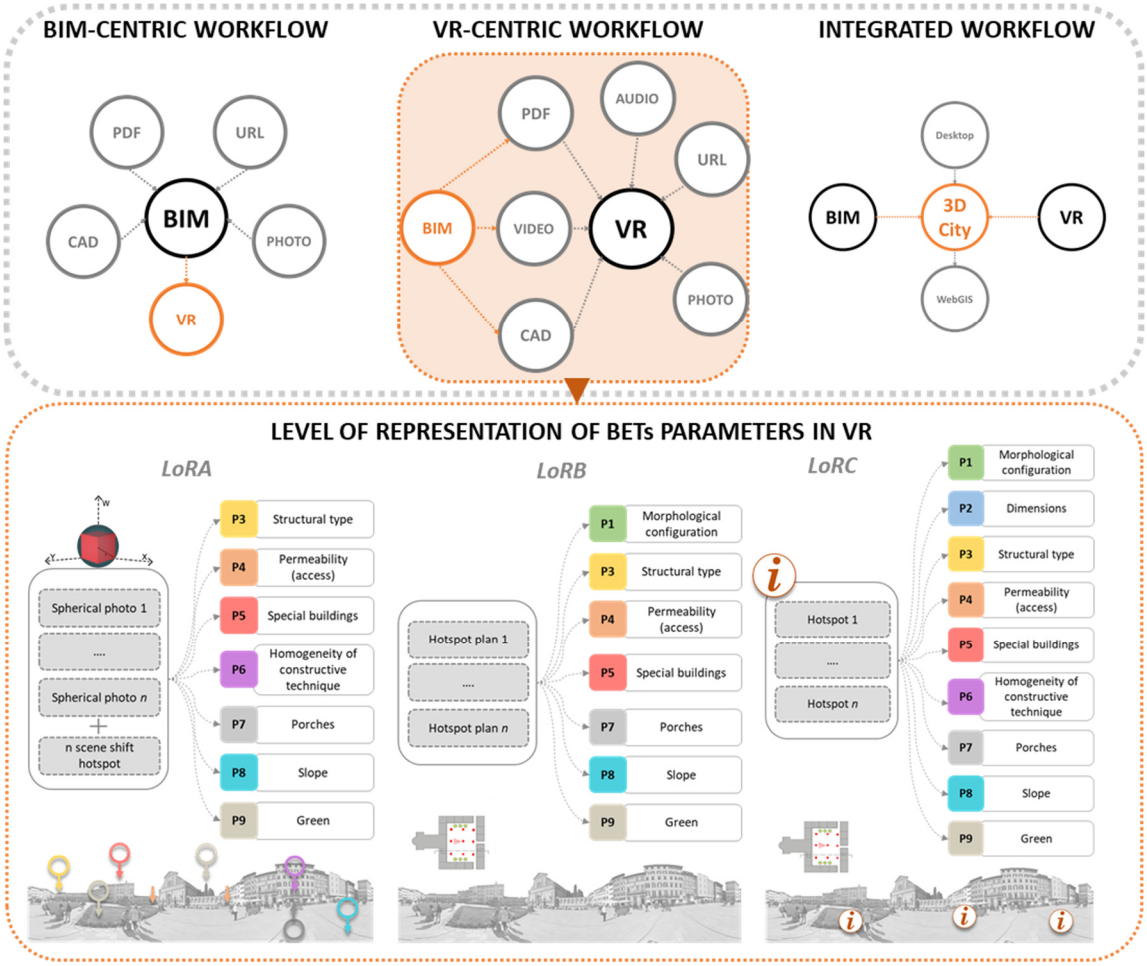
BE S²ECURE
Built Environment Safer in Slow and Emergency Conditions through behavioUral assessed/designed Resilient solutions
Grant number: 2017LR75XK

WP 3 – Representative models of Built Environment Typologies (BETs) prone to SUOD/SLOD. Case studies selection and data

T3.1 Definition of representative BETs models prone to both SUOD and SLOD. BE characterization as function of the building-open space-infrastructures interfaces (e.g. Façades on Square, Street, Pedestrian route) in terms of morphology and construction technologies. Development of tools/methods for BETs representation in extensive models (BIM based) and fast models (VR/AR oriented)

D3.1.3 – TOOLS FOR VR/AR REPRESENTATION OF BETS

ABSTRACT. Starting from previous experiences in literature, the deliverable focuses on the **Virtual Reality** and **Augmented Reality** as a comprehensive State of Art of meaning, tools and methodology. In detail, the work identifies two types of approaches focused on the VR/AR tools: the **BIM-centric workflow** to derive VR/AR contents from a 3D BIM-Based modelling and the **VR-centric workflow** where the Virtualize environment derives from the real one by means of 360° photos and it is augmented with external information contents (CAD, BIM, digitalized paper documents, video, and so forth). Moreover, the multiscale potentialities have been determined extending the workflows towards a **3D-GIS-based workflow** aimed at the representation of BE according to their well fitted scale of details. Due to that, the representation of BETs in VR and AR environments has been determined as a systematization of their main properties and relative opportunities derived by the described workflows.



www.bes2ecure.net
info@bes2ecure.net
UNIVERSITÀ POLITECNICA DELLE MARCHE
Politecnico di Bari
UNIVERSITÀ DI PERUGIA
SAPIENZA UNIVERSITÀ DI ROMA
POLITECNICO MILANO 1863