# R&D PROJECT







**BUSINESS AREAS** 

Área Infraestructuras COMSA, S.A.U

DURATION 2019-2021

BUDGET 519.239 Euros

KEYWORDS Processes Construction-Sustanability-Big Data Analytics-Artificial Neutral Networks

RESPONSABLE (COMSA)





# COMSA

### **Project Title**

New technologies and processes for industrialization of construction works research.

Acronym

SDC

### **PROJECT CONTENT**

## State-of-the-art

Different studies point out that productivity in Construction sector has not grown for at least 20 years – 1%- while the world economy has grown at a rate of 2.8% and the manufacturing industry at 3.6%. If the construction sector were to achieve the same rate of productivity growth as the world economy, it could generate an annual value added of \$1.6 trillion, which is half of the world's annual infrastructure investment needs

### **General objectives**

The first main objective of the Project is to ensure that the production processes of any construction site are carried out daily under a controlled and pre-established standard, regardless of their circumstances and ensuring that they are carried out under the lowest possible direct and indirect costs and deadlines.

And as a second main objective, to create an advanced intelligent decision making system by identifying the determinants of success for the best preparation of competitive bids to be submitted in public or private tenders for construction works, also supported by BIG DATA Analytics and based on Artificial Neural Networks, duly selected and tested

#### **Project tasks**

- I. Basic functionality (WP 1)uncionalidad básica (WP1 1)
- II. Measurements and construction reports (WP 2)
- III. BIGDATA Analytics (WP 3)
- IV. Sustainability (WP 4)
- V. Simulations and on-site testing demonstrator (WP 5)

#### Project conclusions

This Project is in execution period