

# CE 6014 COMPUTER MEDIATED COMMUNICATIONS 2016

Student Name

Pat Feehely



# Student Profile

## BACKGROUND

- ▣ I am a civil/structural engineer .
- ▣ I work in a consultancy firm . I have 20 years experience
- ▣ I am a part time student
- ▣ I am studying my second year

# Objectives for the module

- ▣ I would like to explore communication opportunities which may be relevant to my business
- ▣ I would like to improve my ICT skills as they apply to my workplace.
- ▣ Help my office transition to BIM level 2

# Problem Description

- ❑ In 2013 the CPR (Construction Product Regulations) came into force in Ireland and across the EU. This requires CE Marking and Declarations of Performance (DoP) to be provided for a range of Building Products. (S.I. No. 225 of 2013 EUROPEAN UNION (CONSTRUCTION PRODUCTS REGULATIONS 2013))
- ❑ It is estimated that there are over 160 DoP's required for a standard house. (HomeBond 2015)
- ❑ Contractors are obliged to include these documents in handover documentation to individual householders
- ❑ This becomes complicated when more than one house is being constructed .
- ❑ Small & medium contractors need to improve their documentation processes.

# Proposal Objectives

When Materials arrive on site, they are accompanied by the DoP & CE Marking  
This is the ideal opportunity to record the materials accurately, assigning the correct materials to the correct housing unit

The Objective is to devise a user friendly solution to achieve this.

The image opposite is of a typical “mobile office for a small builder”. Bringing this up to date is the challenge



# Proposed Solution



- The solution to the problem will need investigation but may include the use of a handheld data logger which can scan the delivery docket.
- This will be connected to a database which will store the information and carry out further processing
- The user will be forced to assign a building code to the delivery.
- This filing mechanism is the key to the concept.
- The data can be linked to a specially devised program which will assign the information and will automatically compile the “as built” document for the house holder.
- The system ensures good quality control

# Secondary Benefits

- ▣ In addition to assisting with the compliance with the CRP obligations, there are a number of other benefits which can be devised. These include;
  1. Program planning. Delivery of materials can be linked to Microsoft Project Program for progress analysis
  2. Stock management/ Cashflow. Ensure optimum levels of stock, reduce risk
  3. Ensure no pilfering
  4. Send data to Architect for inclusion in the Building Control File (BCaR)
  5. Link the data to an Object in a BIM model in IFC format. This will be probably used in larger developments