Programme Area: Buildings

Project: Building Supply Chain for Mass Refurbishment of Houses

Title: Appendix 5 – Workshop Presentation 7th September 2011

Abstract:

Please note this report was produced in 2011/2012 and its contents may be out of date. This document is an appendix of Deliverable 4.2 – Draft Supply Chain Scenarios.

Context:

This project looked at designing a supply chain solution to improve the energy efficiency of the vast majority of the 26 million UK homes which will still be in use by 2050.It looked to identify ways in which the refurbishment and retrofitting of existing residential properties can be accelerated by industrialising the processes of design, supply and implementation, while stimulating demand from householders by exploiting additional opportunities that come with extensive building refurbishment.The project developed a top-to-bottom process, using a method of analysing the most cost-effective package of measures suitable for a particular property, through to how these will be installed with the minimum disruption to the householder. This includes identifying the skills required of the people on the ground as well as the optimum material distribution networks to supply them with exactly what is required and when.

The Energy Zone Consortium

Whole House Retrofit For Thermal Efficiency. "Survey Process"

Paul Cook 7th September 2011

Total Flow Ltd.

Summary of WP 4.0 and 4.1

Work Package 4.0 delivered a summary of the existing supply chain

Work Package 4.1 delivered :

- Draft Value propositions for 10 customer segments
- Draft “Ideal state” supply chain design to deliver the needs of mass scale whole house retrofit.
- Gaps between the ideal and current state supply chains
- Contrasts with France and Germany
- Lessons from previous national roll out programmes

WP 4.1 Highlights

Key ingredients to a successful value proposition

- Trusted brand / delivery / support is essential – Single provider
- Disruption must be minimised – one team for installation
- Effective processes to minimise time and cost and maximise quality
- Evaluating potential for energy savings - visible / measurable benefits
- linking retrofit to other value adding works in the home (ie. Loft conversion)
- Providing information to customer and the supply chain
- Providing robust standard work for retrofit works - no surprises

WP 4.2 Process - Workshop

Survey Process

Based on our knowledge of whole house refurbishment :-

- What is needed to complete a robust, one stop survey?
- What are the process steps are needed to deliver?
- What information flows are needed?
- All this in 4 hours!

Process For Today

Split into 2 syndicate teams and consider:-

Team 1 looks at the process needed to survey the exterior of the property

External wall insulation Air tightness Dormers

Doors and windows, access……

Team 2 looks at the process needed to survey the interior of the property:

Internal walls, Floor insulation, Roof insulation

Primary heating, Householder management……

Teams

Tim Hall EWI

David Lake (Wates)

David Brown (Wates)

Seb Junemann (Peabody)

Pete Rayson (Total Flow)

Richard Smith IWI

John Anderson (Wates)

Chris Woods (Wates)

Warren Pope (BRE)

Paul cook (Total Flow)

Marylis Ramos (PRP)

Required outputs

- Each team considers:
- **What process steps are needed to survey the house ?**
- **Each team please produce a process map**
- **Use a post it note to represent each process step and information flow (cover - people, parts, plant, information…)**
- **Consider process steps can be carried out in parallel and which are serial tasks**
- **Which steps can be completed away from the property (Externalised)**

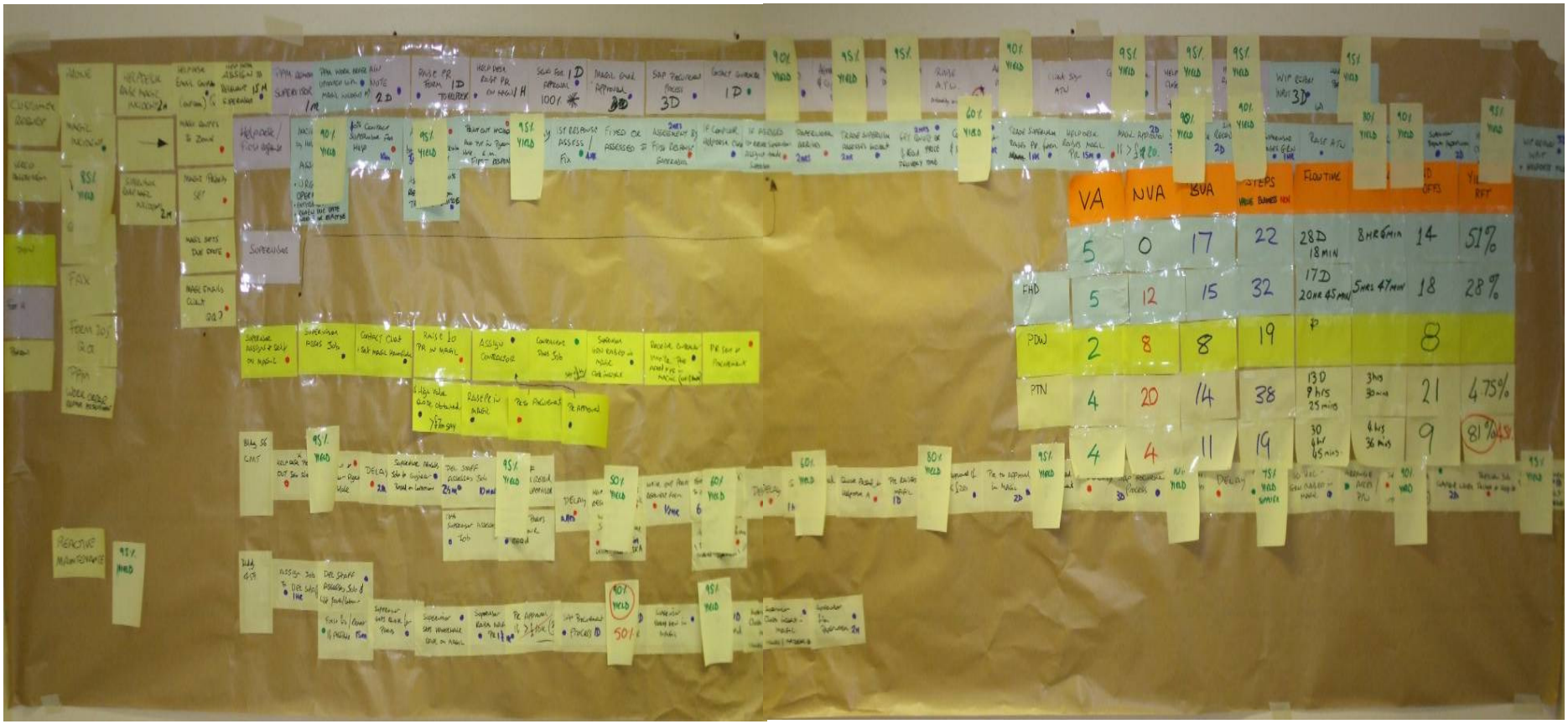
Today's process Part 1

Think through:

What information is needed to establish:

- Pre existing problems : 1% - Insure, 10% Identify, 33% - Solve as standard
- Existing building construction type and materials etc.
- Thermal performance of existing building
- Appropriate measures to take
- Telemetric data to permit accurate costing and fabrication of solutions

Example process map.



Part 2

Consider risks in the survey process

- What information is hard to get and what risks this presents
    - Eg. For internal wall insulation, condition of wiring is a risk
- How risk can be mitigated?
- How can the process be mechanised or systematised to prevent errors?

Part 3

- Total the number of process steps and record
- Add the number of hand offs (where the process moves from one person or organisation / body to another) and highlight them
- Include an estimate of the time taken to complete each process step, include waiting as well as process time
- Highlight any dependencies and where work can be done in parallel with other tasks
- Define the competences required to complete each process step

Challenges

What are the main challenges?

What kind of organisation is capable of carrying out the survey

What are the competences required?

What personal and organisational competences are required for survey and installation work

Are these the same people / the same organisation?

Review

- Review of the day and Comments.

Thank You