CLOEMC IV

INTELLECTUAL OUTPUTS 1-6
Activity 2
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final version
1. Intellectual Output 1 – Manual 20 – M20. Revitalisation and Refurbishment in construction

Responsible Partners: AEEBC / AWBUD (related parts indicated in brackets)
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Kevin Sheridan

1. Theory or refurbishment and revitalisation (AWBUD)

2. Refurbishment of modern buildings (AWBUD)

3. Revitalisation of heritage / monumental buildings (AEEBC)

4. Urban Mining (DARM)

5. Case studies

Responsible Partners: RU / CIOB / PSMB (related parts indicated in brackets)
The principal authors:
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Arnab Mukherjee
Peter Nowak

1. Building Information Modelling, scope and definition (RU)
2. Stages of BIM (RU)
3. BIM Implementation (CIOB)
4. Aspects of the interface, differences between systems / software (CIOB)
5. Use of BIM in construction projects / case studies (RU/CIOB/PSMB/ALL when possible). Owner requirements vs construction companies capabilities.

The principal authors:
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1. Introduction - chosen algorithms for optimisation in construction (WUT)

2. Tools used in decision making in construction, (RU)

3. Optimization algorithms (tabu search, simulated annealing, genetic algorithms, particle swarm optimisation, neural networks, etc.) - cost, time, quality, etc. (WUT)

4. Optimisation of structures (design) (WUT)

5. Logistics optimisation - lean management RU, supplies, KASS, etc. (WUT)

6. Case studies (WUT / RU)

Responsible Partners: WUT / RU / **DARM** (related parts indicated in brackets)

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1. Introduction (DARM)

2. Agile Management (RU), adaptive Life Cycle, Stakeholder engagement (DARM)

3. Cross-Cultural Aspects in Construction (DARM)

4. Gender Aspects in Construction – WUT  Role of the woman in CI (CIOB/WUT), involvement (DARM)

5. Communication in Construction (WUT)

6. Case studies (RU/WUT/DARM)

Responsible Partners: WUT / DARM (related parts indicated in brackets)

The principal authors:
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1. Soil characteristic, soil description and mechanics, types of soil, strength and strengthening, soil samples, water, what information to gather during site preparation (WUT)

2. Elements of structural mechanics (WUT/DARM)

3. Practical applications (WUT, DARM)

4. Case studies (DARM/WUT)

The principal authors:
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1. Introduction, learning outcomes.

2. Basis and definitions of CSR. (PSMB / WUT)

3. First pillar – element of CSR of the construction company. (PSMB / WUT)

4. Second pillar - Sustainable Construction vs. CSR. (PSMB / WUT)

5. Third pillar - Social Influence of CSR. (PSMB / WUT)

6. Summary

7. Case studies - advantages and benefits of CSR in Construction Company. (PSMB / WUT)