

Minutes WP T2 meeting

Meeting: WP T2 8th June 2018, 09:00 hours – 16:00 hours
Location: Deltares, Boussinesqweg 1, 2629 HV Delft, The Netherlands
Attending: see list of Attendance (Annex 1)

Short introduction, recap of partner roles

Partners introduce themselves.

Discussion Glasgow notes, selection of Scottish Canal sites

Summary of sites priority by partner

- Ranking 1 - **Bowling site**:
 - Separation installation based on gravity, land rising, building, eroding, housing project, monitoring already installed
 - Riverside and canal side.
 - Already used sediments with binders on parking lot
 - Conclusion: promising site! Large volume of sediment involved

- Ranking 2 - **Fort William** (parking lot):
 - Objective: needs to be paved/strengthened 13.000 ton sediment available
 - + = Quarry for lime close by.
 - + = Easy access
 - + = Social acceptance
 - + = Equipment can be installed
- Fort William (coastline):
 - Problem to solve: erosion at shoreline (reinforced sediment possible)
 - Volumes involved are not known (Action for Alasdair to find out?)
- Fort William (marina):
 - Design phase. Fill up slope of marina? Now out of scope? Project for extension?.
 - Excellent site. Good exposure, easy accessible.

Comment: Can we use Fort Williams as one big pilot? Depends on contactors etc.
(Action is to further investigate this in discussion with Alasdair)

- Ranking 3 - **Glasgow site**: Scottish canal site (top site) aka Applecross street
 - Funding for this site is already arranged
 - Comments Richard: Developer to be contracted (tender out, contract soon). To avoid damage to cycle road they want to install a temporary road along the canal (sediments with binders). Contractor will be willing to use sediments and binders (Action: is it in the contract of the contractor? Does the tender meet EU standards/EU compliant?)
 - Dredged sediment of canal to be used here
 - Risk of vandalism

- **Ranking 4 - Gairlochy loch:**
 - Sediment trap. Increased erosion due to deforesting.
 - Pilot site for sand separation unit but no use for sand locally. Legally difficult to organise.
 - Remote location
 - The canal is rock cut in order to link the different lochs.
 - Material to be treated: sediment in the loch and gravel in the sediment trap
 - Who are the end users here?
 - Question is what the link is with the objectives of our project (Suricates)?
 - Sand production in combination to a landfill site?
 - Will be tackled in WP1

- **Ranking 5 – Ardrishaig site:**
 - No connection to coastal protection
 - Remote location

- **Crinan site:**
 - Can be used for some grab samples, not suitable as a pilot site.

Discussion of 3 promising pilots (permits, planning, design, tests, implementation, onsite equipment, evaluation)

- For setting up the pilots we need to have:
 - A design of the pilot site
 - Planning
 - Supervision
 - Evaluation of pilot result

Comments:

For 5 types of sediment: you need 5 plans (types sediment required for cement reinforcement etc). This needs to be coordinated.

Scottish Cannels does not routinely characterize the sediment. No organics analyzed.

- **Glasgow site:**

Sediment: mix of coarse and fine material

- **Fort William site:**

Probably coarser material (Action for Richard to ask Alasdair about volumes available)

Ixane plans to have the equipment ready beginning next year. Size 15 m in length.

Capacity and power needed is yet unclear. Probably a mobile plant permit needs to be obtained? Contractor should have one ready.

Who will set up a work plan and coordinate it to the partners?

For finalizing on what to do at the pilot side, we need:

- List of parameters (July) Action Bruno
- Sampling plan (from July)
- Implementation plan

Action: design of the pilot by Alistair, Richard and Tristan. Staffing of MSc project is planned as of September 2018 by Richard.

We need to have information on characterization and a baseline monitoring plan.

In September Bruno has planned an extra day for monitoring which requires a sampling plan

(Action: Bruno)

Characterization of sediments

Baseline monitoring (T0, T1) by Bruno is discussed:

- Types: site baseline and material baseline
- T1 is at the moment the pilot is starting
- T0 in October for Rotterdam? September for Scotland sites? Grainsize distribution is included. Who will do that? locally or by BRGM? Action: List of parameters to be designed! (calcium content, organic matter content?)
- Action: coordination needed and methods to be decided upon.
- Lab characterization (physical, geotechnical, chemical) can be performed mainly in France
- October and November are planned for testing the material
- Action: Complementary characterization (what do we want to do?) has to be decided upon.
- Richard does characterization for permit application (organic matter, calcium and particle size). 5 samples are collected now. Scottish canal can do chemical analysis.
- Monitoring plan (monitoring material, who will buy it?). What type of sample numbers will we use?
- Transport: taking into account leadtime to order. Application mid July, sorted end of July by Bruno.

Actions: Bruno will make a baselist for characterization & plan ready for Glasgow meeting. Needed for each application (cement application, bio-engineering application, pozzolanic, etc)

Questions/remarks:

- Is there any data from Prisma available? (stated by Eric).
- Who has the lead?? Who will be pilot leader? Scottish canals/uni strathclyde?
- Starting point information Duai? To be shared. Prisma list?
- Table of Ceamas to be used?
- We need to know it before September (limestone, polymer used).
- Who will make the list? Who is taking the lead.
- How much material, dimensions? Characteristics. Info needed for contractor.

Actions: After mid July Bruno will make list depending on info of application responsible. Prepared by Arjan. End of this year finalize the workflow to discuss it with Alasdair Richard will take the lead in design the sampling.

We need to involve Imt Lille Douai (delivers resources to ARMINE). They can contribute to solutions for cement use etc.

Discussion on use of Ceamas data/tools and Prisma, to be checked. Action: we have to ask ARMINE (Mahfoud) via email to put the prisma tool in Dropbox. Is it allowed??
We have to check the Ceamas characterization lists (only physical characteristics?)

Planning

- September baseline T0 (what to you need)
- October baseline in Rotterdam pilot?
- Validation in lab result (spring 2019)
- Field research in summer next year for implementation

Alisdair needs to present us with information on pilots

Lunch 12:00 – 13:00

Discussion of Rotterdam pilot

Introduction Marco Wensveen en Alex K.

Pilot is presented (see presentation in dropbox)

Objective: to monitor the impact of redeposition of sediment on environment.

Discussion on permits/implementation is taking place with the Authority RWS. This should be clarified within 2 weeks. We are in discussion with 3rd parties (ARK/WNF) about collaboration and pilot location. Implementation at Groene Poort or fatherout to sea.

In August 2018 the deepening of the harbor channel is finished. Spring 2019 is planned for implementation of our pilot. We will use standard surveys (echo sounding). Flow velocities, labscale rheology will be performed by Alex.

We are applying for extra funding in September 2018. We will follow bathimetry using optical cable (temp. difference is function of cable depth). Measer the speed of sedimentation. Fingerprinting of sediment is used to see how much material is transported. Sediment balance, sedimentation rate will be monitored.

Permit will takes 5 days in Rotterdam (only notification is needed)

Upcoming events

3rd September: site (re)visit 13:00 excursion

4th September: WP2 meeting at Richards for detail discussion on the pilots.

5th September: Steering Group meeting. All partners to be present

Future Experiments and surveys on pilot sites during and after implementation will be discussed during the 24 – 27 September monitoring session.

Deliverables 2018

Deliverables 2018 are discussed

T2.1.1	deliverable - Design and construction of dynamic dehydration pilot equipment		Sep-2018
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T2.1.1 Design and construct dehydration (needed baseline):

Short: General data could be presented.

Action: Richard will ask Alasdair about time schedule. (design needs to be clear before applying for pilot permits.

General: now is not good timing to ask for delay of 6 months.

Quick screening will be ready before summer (couple of weeks), baseline ready in September 2018.

How much time does Ixane needs for the design??

Good be ready end of the year (in 3 months time) but more information is needed for the final design and fine tuning of the design which will take 3 months extra. This is no probable if it fits the planning of the pilots.

Applecrossstreet starts beginning 2019.

T2.1.2	deliverable - Testing the pilot equipment on a real site (small scale test)		Dec-2018
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T2.1.2

No working formulation, no recipes, quantifying criteria available.

Will this work for Applecrossstreet? We probably cannot meet the deadline there. Solution is to focus on the Bowling site.

3 months is acceptable for Bowling. Action: check with Alistair for Bowling solution.

Some tests are possible, not a formal pilot.

T2.2	activity - T2.2	Sep-2017	Dec-2020
T2.2.1	deliverable - bio-engineering with sediment: Formulation and lab tests of eco-solutions report		Dec-2018
T2.2.2	deliverable - sediment as a pozzolanic material: Formulation and lab tests of eco-solutions report		Dec-2018
T2.2.3	deliverable - concrete made with cement and sediment: Formulation and lab tests of eco-solutions report		Dec-2018

T2.2.1 Bioengineering: formulation and lab test (Armine). Due Dec 2018 we will leave it.

T2.2.2 id

T2.2.3. id

WP I1	Pilot application of sediment reallocation within the system to 'reset' a natural system for bank nourishment in Port of Rotterdam	Sep-2017	Sep-2020
I1.1	activity - I1.1	Sep-2017	Mar-2019
I1.1.1	deliverable - Port of Rotterdam pilot site description		Mar-2019
I1.1.2	deliverable - planning of dredging activities for the pilot		Sep-2018
I1.1.3	deliverable - Permits for the application of 200.000 t sediments within Port of Rotterdam		Dec-2018

1.1.1. Contractor yes

1.1.2. Permits oke

WP I3	UK trial pilot site for Bowling river site pilot focused on Bio-engineering with sediment	Sep-2017	Sep-2020
I3.1	activity - I3.1	Sep-2017	Dec-2018
I3.1.1	deliverable - Selected implementation site description		Mar-2018
I3.1.2	deliverable - planning of dredging and works activities for the pilot		Mar-2018
I3.1.3	deliverable - Trial Pilot site specification design		Mar-2018
I3.1.4	deliverable - Permit for the application of 2 000 t sediments		Dec-2018

I3.1 March 2018 has been done

I3.1.2. and I3.1.3. will be delivered half year later

I3.1.4. permit expected spring 2019?? (Action Alasdair)

Rest copy of above.

Other relevant issues

Richard needs subsidy contract partnership agreement and revised implemented proposal
End of next week Eric will sign and share it (Action Eric).

Problem to change partner took a lot of time via the Interreg side. Not all signatures on different documents are available (for the formal oke of interreg). Within few weeks sorted.

Richard: Equipment for pilot to be entered in first financial report? Depreciation of full costs?
Only during the project.

Meeting closed at 14:43 uur.