

Building Integration of Solar Thermal Systems – TU1205 – BISTS

# WG 1-3: Coordination Meeting-1 16:30-17:30

Planning of work to be done – Finalise Deliverables, Projects, Training School 2017, Organisation of Conference in 2017.

Main purpose: Explain the work that remains to be done



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# WG 1-3: Coordination Meeting-2 9:00-10:30

Planning of work to be done – Finalise Deliverables, Projects, Training School 2017, Organisation of Conference in 2017.

**Main purpose**: Assign tasks – Agree dates





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## **Deliverables –WG1**

- Task 1.2 Development of new BISTS solutions (Year 3 & 4)
- Task 1.3 Characterisation of BISTS developed in Task 1.2 (Y 3 & 4)
- Need to prepare a report (part of D3.4) based on the various projects which will be included also as chapters of the handbook (date?).



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### **Deliverables –WG2**

- Task 2.1 Development of new mathematical and numerical models for BISTS (Years 3 & 4)
- Task 2.2 Validation and implementation of codes developed in
   2 1
- D 2.4. Report on the validation of developed codes, both thermal and optical (Month 30) (DONE)
- D 2.5. Report on the new models developed during the project and potential for adaptation for RES (Month 42), (September)
- D.2.6. Report on the development of new models for innovative integrated STS applications (Month 46), (November)





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### **Deliverables –WG3**

- Task 3.1 Design of innovative BISTS designs
- Task 3.2 Fabrication of BISTS prototypes
- Task 3.3 Characterisation of novel BISTS indoors and outdoors to assess the actual performance in real conditions
- → For all these use material from various projects Any other who has a system developed to contribute (To Aggelos)?
- D.3.4. Report on fabricated integrated STS prototypes optimised for increased efficiency
  and low cost. Full building services integration (e.g. into existing heating, cooling, hot
  water) or stand-alone operation but integral to the structure. This will depend on the
  extent of own research funding allows (Month 36). Need a report ASAP, (end of
  May)Together with WG1.
- D.3.5. Report on the performance of new integrated STS/RES prototypes: A country
  performance comparison with geographic diversity (South, Central and North Europe),
  (Month 42), (September). Together with WG2 (D2.5)
- D.3.6. Handbook for architects and building services engineers on the developed BISTS solutions for the design market ready products. (Month 46), (date?)



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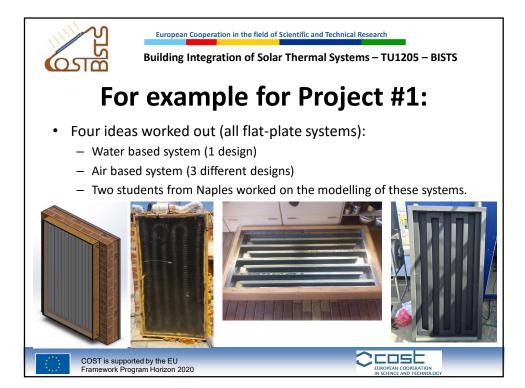
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# **Projects (for D3.4)**

- Need to continue the 3/4/5 projects without involving other partners.
- If any partner has material on BISTS send it to Aggelos.
- Required:
  - Description of collector/system
  - Detailed drawings
  - Performance data/characterisation
  - Modelling if any.
  - Integration solutions applied or that can be applied.









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# **Training School**

- Need to be done in next meeting if on the last one we will have also the conference.
- Same line as previous ones
- Feedback received from two schools already carried out → positive.
- → Need copy of all presentations to upload on web.
- Suggest students when asked ...
- Follow deadlines





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### Handbook

- From previous meeting minutes: The Handbook must be delivered in month 46. Its specifications are given in the BISTS proposal in paragraph D3.6 and will cover the BISTS from the Architectural and Engineering aspect.
- Need to assign a <u>responsible person</u> for each section/chapter and <u>date</u> for delivery for all submissions.
- Follow instructions sent by email 2/10/2015, to avoid a lot of editing....
- After a discussion it was decided that the Handbook will have the following structure:
- Section 1. Introduction-description of the Action (Soteris)
  - 1.1 Classification & Characterisation of BISTS (case studies) (Mervyn and Laura)



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## Handbook-2

- · Section 2. Design Process of BISTS
  - Architectural planning/integration (Aleksandra + Savvides+ Gerald + Vasiliades)
  - Solar system design (mechanical/optical/materials, control) (Christoph, Soteris, <u>Aggelos</u>, Mirko, Ivan)
  - Modelling and performance analysis (<u>Daniel</u>, Jayanta, Christoph, Aggelos, Adolfo, Danijela).
  - Installation options/strategies (Stefan+Yiannis)
  - Testing (standards) (Christoph)
  - Commissioning of systems (Stefan)
  - Maintenance (<u>Stefan</u>+Jayanta)
  - LCA (Disposal) (Daniel + Chrysa+Ricardo)
  - Economics (Mervyn + Christoph)
  - Legal issues (Christofari + Gilles+Rozita)





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# Section 3. New Options Handbook-3

- - New architectural design options(Aleksandra + Savvides+ <u>Gerald</u> + Vasiliades+Visa+Rene)
  - New systems and application options (Yiannis + Dorota + Jasna + Istvan + Andy)
  - New materials (pcm, nanomaterials, nanofluids) (Jasna)
  - New construction, different solutions (Trevor+Laura)
  - Options for retrofit applications (e.g. extent SHW to space heating) (<u>Trevor</u>+Andy)
- Section 4. Analysis of new project concepts/ideas
  - Project #1: Soteris
  - Project #2: Mervyn
  - Project #3: Aggelos
  - Project #4: David
  - Project #5 : Sandra(?)
  - Architectural integration (Aleksandra + <u>Savvides</u>+ Gerald + Vasiliades)
  - New simulation models (<u>Annamaria</u>+Adolfo)
- Section 5. Conclusions and Outlook (Christoph+Soteris)
- Section 6. Supporting material (Laura + Sarah+Gilles)







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### **Action Conference**

- All need to contribute with a paper
  - Not like symposium (14 papers-some not on BISTS)
- All need to participate
  - Action event reimbursed
- Time: Before end of March 2017
- It will be open to other persons (major event)
- Need a good planning and organisation.







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# From Vademecum (2016)

#### 8.2. Final Action Dissemination (FAD)

#### 8.2.1. General principles

Final Action Dissemination refers to material produced after the four-year period of the Action in order to share the COST Action results with the wider research community. The material covers examples mentioned in Section 8.1.

Final Action Dissemination material (FAD) must be ordered and paid directly by the COST Action Grant Holder. The COST Association will provide an additional grant of up to a maximum of EUR 10 000 in total (V.A.T. is not eligible) to the COST Action Grant Holder.

Requests for this additional grant need to be sent to the COST Association at the latest 6 months before the official end date of the COST Action, using the template soon available on the COST website.

The request must be approved by the MC and the COST Association, who will issue a Grant letter to the COST Action Grant Holder.

The COST Action Grant Holder must ensure that the FAD invoice is paid no later than the date stated in the Grant Letter: 12 months after the official end date of the Action.

The Grant Holder will present to the COST Communications Unit a print preview or digital copy of the material before production to ensure that the branding guidelines have been respected.

The grant payment to the COST Action Grant Holder is only guaranteed once the COST Association has approved that the FAD complies with the Guidelines for Dissemination.

In case of printed material, the Communications Unit will receive 3 copies upon issuing. Links to digital material will also be provided.



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# Section #8.1

#### 8.1. Dissemination Material

The Action's dissemination strategy is detailed in the Memorandum of Understanding (MoU). All dissemination activities and material produced must be in line with the dissemination strategy and the purpose of the COST Action. Dissemination material must be described in the Work and Budget Plan approved by the COST Association and the Management Committee (MC).

In order to ensure the material produced complies with the COST corporate identity, please refer to the branding section in the Guidelines for Dissemination, available on the COST website.

Dissemination material must be available for audit purposes and copies will be provided to the COST Association upon request.

#### 8.1.1. Eligible expenses

The COST Grant can support expenses related to the production of the following dissemination material:

- Website
- Material for display or distribution (flyers, posters etc.) Multimedia content
- Publications (peer reviewed journal papers, book of abstracts, handbooks, guidelines etc.)

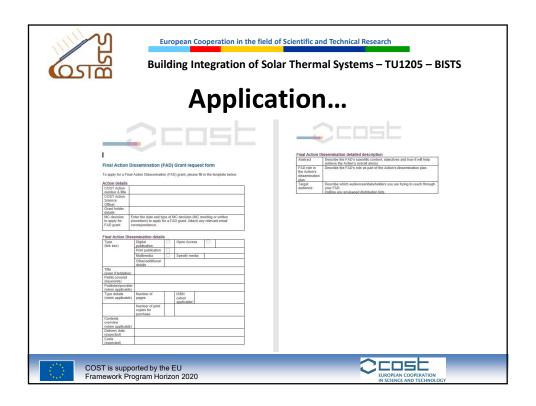
The following expenses can be considered as eligible (excl. V.A.T.):

1. Open Access licenses or the purchase and distribution of a fixed number of copies of high-quality publications produced by a renowned publisher (usually books or journals). Proofreading, editing, layouting, production and distribution expenses.











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# Handbook-planning

- Ready by M46 (Jan 2017-end)
- Need one month for printing (M45-Dec 2016-end)
- Need two months for Editing (M43-Oct 2016-end)
- → This means that everything needs to be submitted before the next meeting.
- The soonest you submit the better.
- · I cannot undertake the edition by myself.







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## **Section leaders**

- Section 1. Introduction (Mervyn)
- · Section 2. Design Process of BISTS (Daniel)
- Section 3. Analysis of concepts/ideas (Aggelos)
- Section 4. Projects (all project leaders)
- Section 5. Conclusions (Ricardo)
- Section 6. Supporting material (Laura)
- Submit material first to the above persons and after an initial screening and review to me as well....



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### **Conference**

- Combine with some other conference (as the symposium)
- Organise our own conference (preferred)
- Name: International Conference on Building Integrated-Renewable Energy Systems (BI-RES)
- · Areas to cover:
  - Building integrated solar thermal systems (BISTS)
  - Building integrated PV/T (BIPV/T)
  - Building integrated Thermal Storage (BITS)
  - Building integrated hybrid systems (BIHS)
- Publish a SI in RENE+Energy+SE
  - Need a Guest Editor (GE) to handle the review process or Guest Editor team (one Managing GE)







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# **Conference**

- Need to:
  - Fix date and time (within or outside the Action period)
  - Set up an organising committee. (SG members)
  - Set up a scientific committee.
  - Publish a call for abstracts the soonest. Deadline 3/9/2016
  - Prepare submission instructions.
  - Setup website to help the process.
- Everybody need to support the conference by:
  - Submitting paper/s (only relevant please because they maybe rejected)
  - Publicize the event in our countries
  - Participate in conference (free for Action members)



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# WG 4: Meeting

**Dissemination Activities** 

COST is





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# **Agenda**

- Website (Soteris)
- Status of deliverables (Soteris+David)
- Planning of Action Conference (2017) (Soteris)
- STSM's 2016 (Soteris+Gilles)
- Publications, dissemination and outreach activities (Soteris)



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# **Web Page**

- 1. COST official web page
  - http://http://www.cost.eu/domains\_actions/tud/Actions/TU1205
- 2. Action web page
  - Web site: http://www.tu1205-bists.eu/
  - Password: cost 1234!
  - Need <u>photo</u> of each participant and <u>logo</u> of each institution (have most of them except for new members)
  - Photo session end of the day (during breaks)
- Any documents should be sent to Mr. Costas Christofi. Email: c.christofi@cut.ac.cy





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### New additions in website

- Photos of participants plus affiliation.
- · All case studies received so far.
- Guimaraes presentations
- HB instructions
- Book PDF
- · Photos from previous meetings.
  - Guimaraes added
    - · Meeting photos
  - Go to webpage



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### Status of deliverables

- First deliverables now finished.
- Book published. Biggest achievement of the Action so far!
  - Each at least one received a copy.
  - More copies are available.
- D 1.4. Report on the evaluation technologies available for BISTS characterisation (Month 24). (Now finished with 1 year delay).
- D 2.4. Report on the validation of developed codes, both thermal and optical (Month 30)(Need this ASAP-Have it?)





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# Deliverables to do soon...

- D.3.4. Report on fabricated integrated STS prototypes optimised for increased efficiency and low cost. Full building services integration (e.g. into existing heating, cooling, hot water) or stand-alone operation but integral to the structure. This will depend on the extent of own research funding allows (Month 36). (Need this ASAP).
  - Mainly focus on 3/4/5/? projects.
  - No matter if you are WG3 member, if you have material to contribute join the group working on this....
- Need to finish other deliverables within this last year keep dates agreed.



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# STSM's Third year

- Provision for 4 STSMs.
- None done so far.....
- To be finished before end of April 2016.
- Better to be combined with work on deliverables.
- Applications to Gilles (STSM manager) and myself ASAP. (those interested should have made arrangements during the meeting).

