

SMART DEMO MEETING DEC 10TH & REVIEW MEETING DEC 11TH
MINUTES

Meeting Subject: **SMART Demo Meeting M34 –Dec 2014**
 Venue: AD.R.I.A. Abruzzo s.r.l., S.S. 17 km 94,700 - Z.I. Sulmona, Pratola Peligna (L'Aquila), Italy
 Date: **December 10th & 11th, 2014**
 Hosting Partner: **ADRIA (SMEs)**

Participants

| Beneficiary | Participant |
|----------------|--|
| ETRA | Ettore MUSACCHI Valerie SHULMAN |
| IASLIM | Joze JENSTERLE |
| UNITV | Fabrizio QUADRINI Giovanni TEDDE |
| LABOR | Andrea SALVO Giorgio RECINE (Dec 11th) Ilaria IANNACCONE |
| TI | Lisa SCHWARZ |
| ADRIA | Ettore MUSACCHI |
| GRP | Tomislav OSKORUŠ |
| TEBAMIX | Wieslaw WASNIOWSKI Bartłomiej MÓL Marek DZIUBINSKI |
| BPF | Helen FOGARTY |
| ND | Hroar BRAATHEN |
| REA (Dec 11th) | Ellen SCHRAUDOLPH |
| REA (Dec 11th) | Christopher DREW |

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Introduction

The meeting, held in Sulmona on the 10th and 11th of Dec 2014, was the M34 General Meeting of the SMART research project (contract n. 286465) funded under the FP7 by the European Commission.

December 10th, the first day, was dedicated to a DEMONSTRATION meeting with the partners to introduce the press, and the first mould, and to demonstrate the moulding process on site.

December 11th, the second day, was dedicated to the On-site meeting requested by the REA during the review meeting of September 2013. Thus, in addition to the consortium, the PO and the Expert were also present.

A program was defined and agreed among the Consortium partners. (refer to the Annex I-program).

1. DEMO & TRAINING Meeting, M34, 10th of December 2014

The meeting was organized in order to show the SME partners the press machine, the first mould and the process for the moulding.

The partners arrived at 16.30 in Sulmona, where Andrea Salvo and Fabrizio Quadrini, with the help of two technicians, showed the equipment and the process, respectively. It should be noted that Salvo and Quadrini worked in advance with the technicians to assemble, test and calibrate the equipment in the period prior to the M34 Meetings and demonstration.

Each step of the process was discussed and demonstrated to the partners. Tebamix technicians, GRP remained with the equipment technicians to gain further details of each step.

The demonstration meeting ended at approximately 19.00.

2. On-site meeting, 11th of December 2014

While waiting for the REA's arrival in the late morning, the SME-AGs and SMEs had a short pre-meeting in order to discuss the exploitation plan and the "joint ownership agreement" showed by Valerie Shulman (Exploitation manager).

The agreement focused on regulating the shares of ownership, the SMART press ownership and related costs, IPRs protection and the application of joint owner knowledge in future research.

Minor revisions were made in the Ownership Agreement. In particular, an important point to be checked is the costs associated to the press machine. It was agreed that the post-project costs related to the equipment maintenance, etc., would be covered proportionately by those using it on the basis of their use.

The REA arrived at noon. After a general introduction, the PO informed the consortium that their amendment request has been accepted in all the modifications provided (extension of two months and modification of some of the deliverable submission dates). Unfortunately, during the last months the PO was fully engaged in the H2020 project evaluation. However, the official approval is on the way and this does not represent an issue for the project progress.

After the general introduction, the consortium and the REA went to the site of the press machine and the demonstration meeting started. It went through the presentation and explanation (on site) about:

1. **The press machine:** the story of the press and its installation at Adria was related before a more in-depth explanation of the machine, the modifications that were made in order to improve the production cycle and make it suitable for the SMART process, and the security measures.
2. **The first mould:** the manufacturing of the mould was explained. Each functional section of the mould was shown and its purpose described.
3. **The process:** the first mould of a 1m² Tile was shown to the REA. Each step in the production process was explained in detail, step by step.

The demonstration lasted until 14.30. During the afternoon, TEBAMIX showed the results that they had obtained in their factory during the last months using materials provided by 4 separate companies : GRP, ADRIA, Orzel (Poland) and a Swedish company. Product samples were circulated around the table to illustrate the different results.

The test samples indicated that medium sized granulate out-performed the fine rubber granulate for several reasons. The problem is in the discharge of vapour and gases. At 25 minutes, T 160° it is enough to achieve a good item with thickness 1.5 cm. Their best results at 180° were achieved by using coarse granulate from Adria (without drying). In their opinion, the products can be used in storage areas, as anti-vibration pads or other similar applications.

UNITV showed the results and achievements of the period (please, refer to the presentation of the October 24th 2014 meeting for details). One of the most relevant results is the co-molding that UNITV obtained with granulate and EPDM. The sample was circulated around the table for a closer view to note the bonding that had occurred. The tile was produced with a colored upper flat surface, no cracks, good rubber surface and interface between the two materials. This tile was obtained with the composition of three different layers: EDPM upper surface, coarse rubber and, on the bottom, fine rubber. **It is stated that the prototype obtained with the EDPM could be a patentable result. Also the REA suggested to evaluate this option, in case with support of REA-IPR helpdesk.**

Since TI is waiting for the samples form TEBAMIX, which will be arriving the week after the meeting, there were no additional results to be showed during the meeting, in respect of what had already been shown during the last meeting in October. For details, please refer to the minutes of the October Meeting, page 9 and 10. It is anticipated that the first results TI will be expected just before Christmas.

LABOR went through a short photographic reportage on the work done from the end of 2013 until November 2014, in order to find, buy, transport and modify the press machine. A short presentation was done about the mould of the first product, showing the inner sections and the technical arrangements provided in order to have the heating.

Last part of the meeting went through the exploitation plan of the project and the PO wanted to know the plans of all the AGs and SMEs involved. The exploitation manager prepared a package with the most important documents to be discussed in the meeting: the exploitation plan (including the “Joint Ownership agreement”) and the dissemination plan.

Here is a list of the main outcomes, comments and suggestions:

- **NEW OWNERSHIP TABLES:** in the current version of the exploitation plan, the revised Ownership tables (taken from the DoW) are included. The percentages of Ownership for each partner were formally agreed at the M34 Meeting in Sulmona (ADRIA). After reviewing the document, each partner initialed it. It is anticipated that the document will be circulated to the partners for their formal signatures before the Christmas Holiday.

- **COMMERCIAL PLANS:** Due to project delays, the commercial component is at least 6 months behind schedule. Nonetheless, the SME, Association, and Research partners have begun to catch-up and have completed the preliminary steps for describing at least one product output. Additionally, the first brochure has been completed and circulated, and a descriptive poster has been displayed (BPF). The Team is working on a product description that can become a model for future products. It is anticipated that a profile will be available for circulation early in the New Year.
- **WEBSITE:** the website does not currently have much appeal because the information has been stagnant and limited. The site is being revised and updated with the information discussed herein. New information will be about the equipment, installation, mould and trials. Additionally, announcements will be made concerning presentations, papers and discussion groups. Progress will be followed. It is anticipated that information about the products and testing results will become available on the site for public consumption as well as in an internal discussion corner. The REA suggested to improve the site following these two key aspects: the sense of excitement and the discussion groups addition.
- **IPRs PROTECTION:** it seems that the SMART process cannot be patented. However, the PO suggested to check and investigate for the possibility of another means of protection of the knowledge. ETRA suggested that that the process is the most important knowledge and therefore a confidentiality agreement will be signed among the partners, except to verify other IPR options. The PO is not sure that this is a sufficient means of protection. As stated before, the EPDM product can be patented but this has to be evaluated. We can ask support to the IPR helpdesk.
- **LINK TO OTHER FP7 PROJECTS:** the PO asked ETRA if they had learned valuable lessons from participation in other FP7 projects: TyGRE and Anagennis. As for TyGRE, which ended in 2013, from a technical point of view the projects bear no resemblance, although they share a basic concept, because they have similar high potential as both projects aimed to attain a high valorization of the output. The TyGRE project focused on the production of SiC from post-consumer tyres, that is one of the highest value raw materials. SMART is focused on the production of moulded product from a raw material that normally could not be moulded itself without additives. As for Anagennis, some parallels with SMART are possible because Anagennis will allow a deeper investigation of the potential market for recycled tyre materials, that are more or less in connection with the markets of SMART products, and the lessons learned can be applied for the future development of the SMART project.
- **GENERAL FINAL REMARKS:** as a final remark the PO underlined that the specific business plans of all the AGs and SMEs are needed in the final version of the exploitation

plan. Also, the market overview has not sufficiently developed at this stage and further information is needed by the end version of the plan.

3. Conclusions

The meeting was positively closed on schedule. All the main topics and technical features planned in the Agenda were considered and discussed with a good level of participation and commitment provided by all participants.

The PO and the expert have been positively impressed by the work done. Since the next SMART meeting will be held during the ETRA conference (March 25th -27th , 2015) in Brussels, they expressed the willingness to attend the conference and the SMART final meeting.

Next Meetings:

- **22nd ETRA CONFERENCE:** Wed to Fri 25-27 March 2015, NH Sablon Hotel, Brussels.

Annex I – Program

PROGRAM OF THE ON-SITE MEETING ADRIA, 10TH AND 11TH of December 2014




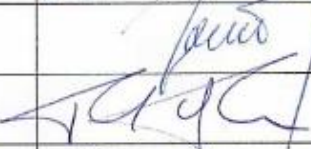





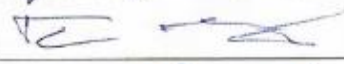


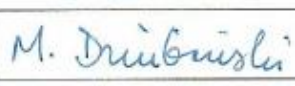

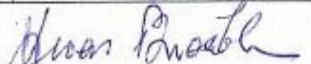


WED DECEMBER 10TH (ALL PARTNERS) – TRAINING MEETING

- 15.00→ departure from LABOR to ADRIA (pick up point: Labor). If someone has problem, there is another pick up meeting point the 11th at 12 (see below).
- 16.30→arrival in ADRIA
- 16.30 – 19.00→ demonstration and training
- 20.30→ dinner

THU DECEMBER 11TH (ALL PARTNERS + REA) – PRE MEETING AND ON-SITE MEETING

- 10.00-12.00→ Pre-Meeting
- 12.00-14.30→ arrival of the REA and demonstration meeting
- 14.30-15.30→Sandwich lunch
- 15.30-17.30→On-site meeting
- 19.30→arrival in Rome

Annex II – List of participants and signatures

| SMART Meeting 11 December 2014 : Attendees | | | |
|--|-----------------|-------------|--|
| Organisation | Fist name | Family name | Signature |
| 1. ETRA / ADRIA | ETTORE | MUSACCHI |  |
| 2. ETRA | VALERIE | SHULMAN |  |
| 3. IASLIM | JOZE | JENSTERLE |  |
| 4. UNITYV | FABRIZIO | QUADRINI |  |
| 5. UNITYV | GIOVANNI MATTEO | TEDDE |  |
| 6. LABOR | ANDREA | SALVO |  |
| 7. LABOR | GIORGIO | RECINE |  |
| 8. LABOR | ILARIA | IANNACCONE |  |
| 9. TI | LISA | SCHWARZ |  |
| 10. GRP | TCMISLAV | OSKORUS |  |
| 11. TEBAMIX | WESLAW | WASNIOWSKI |  |
| 12. TEBAMIX | BARTLOMIEJ | MCL |  |
| 13. TEBAMIX | MAREK | DZIUBINSKI |  |
| 14. BPF | HELEN | FOGARTY |  |
| 15. ND | HFOAR | BRAATHEN |  |
| 16. I.Q. MANAGER | KYRIACOS | NEOCLEOUS | — |
| 17. REA | ELLEN | SCHRAUDOLPH |  |
| 18. REA | CHRISTOPHER | DREW |  |