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# DISCO

## Grant Agreement: 755443

## **DELIVERABLE D1.18**

3AM Minutes: Minutes of the 3<sup>rd</sup> General Assembly, held in connection with the 3<sup>rd</sup> Annual Meeting

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Date of issue of this report: 24/06/2020

Report number of pages: 7 p

Start date of project: 01/06/2017

Duration: 48 Months

Project co-funded by the European Commission under the Euratom Research and Training Programme on Nuclear Energy within the Horizon 2020 Framework Programme			
Dissemination Level			
PU	Public	Х	
PP	Restricted to other programme participants (including the Commission Services)		
RE	Restricted to a group specified by the partners of the Disco project		
СО	Confidential, only for partners of the Disco project		

## 1 Minutes of the 3<sup>rd</sup> General Assembly of the DisCo Project

Time: 16:15-16:45, 23 April 2020

Place: Videoconference

Attended by representatives of members of the General Assembly (Beneficiaries of the DisCo project): Lena Z Evins & Petra Christensen (SKB), Alba Valls, Lara Duro & Olga Riba (A21), Claire Corkhill (USFD), Emmi Myllykylä (VTT), Volker Metz (KIT-INE), Nieves Rodriguez (Ciemat), Dirk Bosbach (Jülich), Ian Farnan (UCAM), Olivia Roth (Studsvik), Frederic Clarens(Eurecat), Joan de Pablo (UPC/Eurecat), Karel Lemmens (SCK·CEN), Christophe Jégou (CEA), David Hambley (NNL), Enzo Curti (PSI), Laurent de Windt (MINES Paris Tech/Armines), Paul Carbol (JRC).

In addition, more people from the partner organisations attended.

Guest: André Jouve (Project Officer), EC

The meeting was chaired by the Coordinator, Lena Z Evins.

Lena opened up the meeting by welcoming everyone and presenting the agenda (see Appendix 1). There were no other business proposed at the start and nothing to be added.

#### **1.1 Information from the Coordinator team**

\*Deliverables: Lena showed a table of pending deliverables, plus three deliverables that need to be updated before the 2<sup>nd</sup> periodic report. The three to be updated are D2.1, D2.2, both connected to WP2. In addition, D1.27 Plan for peer-reviewed publications should be updated both to reflect published papers but also any changes in the plan.

Upcoming deliverables, that are to be submitted end of May this year, are D3.2 and D4.2 that are to document data available for delivery to the modellers in WP5.

Some comments were also made to point towards all deliverables related to the final reporting, in 2021.

\*Milestones: We have passed all milestones we should at this point in time, except nr 4 "All samples prepared". This is due to the delays , relative to the original plan in Annex I, related to sample preparation mainly at SCK CEN but also at some other partners (e.g. UCAM, Ciemat) However, we expect this to be done in a few months in spite of the Covid-19 situation, so this is good. Upcoming milestones: We are at Milestone 9, 3<sup>rd</sup> Annual meeting held. Next milestone is the data delivery to WP5, which partly has been passed already, but will be considered to be fully passed when the two deliverables, D3.2 and D4.2 have been submitted.

\*Peer-reviewed Publications:

We have six peer-reviewed papers out (see list in Annex 2): Nice to see that we have some papers with collaboration among work packages. Everyone should note that the EC rules say that papers need to be available by open access no later than 6 months after publication, and also remember the EC acknowledgment.

We have some issues with papers not available yet, for example Kerleguer et al. This we need to get Open Acces soon. Christophe (CEA) clarified that the gold open access will be paid soon.

\* EU Reporting & Payment plan :

First periodic report was approved, now we will provide the 2nd report which covers month 19 to month 36 (01/12/2018 - 31/05/2020)

From EC due to Covid-19: "flexibility will be allowed as regards the 60 days period for the submission of the report. However, any late report linked to payment will subsequently lead to later payment." We need to get a collective view of how the Covid-19 situation is and how it will affect the work, so please send your statement to Lena.

The reporting will be done through one Technical report (coordinated by Lena) and one Financial report (coordinated by Petra). Enzo asked that this time it should be clearer regarding the content and length of the technical report from the partners, and Lena agreed that a template should be sent with clear instructions as to expected length and format. For the financial report, Petra will send an excel sheet to all partners for them to specify the use of resources. This should be sent to Petra for verification and validation by SKB before adding the information to the EC Participant Portal.

Some advice based on experience from the first reporting and from a guidance document from the EC was given.

### 1.2 Delays relative to Annex I

The delays of the project were discussed.

There are some delays, mainly in WP2 and WP3. In WP2 there are still samples that need to finalized and characterised. That information should be included deliverables D2.1 and D2.2 According to what we wrote in the first periodic report, we expected this to have happened already. Some parts of the delays in the latest months are related to Covid-19. This delay is also the reason for not reaching the milestone "All samples ready", which in hindsight was a poorly formulated milestone. In spite of the Covid-19 pandemic, at SCK CEN they have been working on the samples and at the time of the meeting, it was envisaged that they could be

sent to VTT in the upcoming weeks. This may affect the D4.2 deliverable. The delay in JRC concerns fuel dissolution experiments for two partners: Eurecat and JRC. The delay was originally related to status of autoclaves and hot cells, while the Covid-19 pandemic caused the lab to close right at the time when the experiments could start. This will affect the D3.2 deliverable, and it will also mean less than 12 months are available for the experiments. Looking at the experimental matrix, overall, we have a fairly good picture with the majority of experiments started. Therefore, data are available for the modellers to use - so in a sense this milestone has already been passed. We will aim however to officially pass this milestone in conjunction with the D3.2 and D4.2 deliverables are submitted. In practice, JRC and Eurecat (and all partners with ongoing experiments) will pass along the data to the modellers as they become available.

Lena will ask for more information on how the work is affected by Covid-19.

#### 1.3 Discussions on final meeting

Lena informed about the outcome of the ExCom discussion of this event, which was as follows: The final meeting will be arranged as an open conference in conjunction with the Spent Fuel Workshop (SFW) in Barcelona. Exactly how these two events will interact will be decided later on. In any case, an open conference means project external people may attend and submit abstracts for presentations. The date is to be decided later due to Covid-19; the original date was set to March 2021, but we aim more vaguely now at "spring 2021".

Preliminary plan: 2 whole days: afternoon 1st day, full 2nd day, morning 3rd day. A poster session may be suitable to allow more people presenting. However, this needs to be further discussed since we will merge with SFW. Karel Lemmens mentioned it would be good to have a chatting possibility such as we were having during this videoconference. Paul Carbol pointed out that e-posters could be used before, during or after the event. Lena will check this out.

Lara Duro discussed the planning in conjunction with the SFW and mentioned that one possibility is to enclose the presentations as a DisCo session within the SFW, then they will be shown to a wider audience. The focus should be on presenting the science, rather than give an activity report. A high level overview of scientific progress should be made by the project, and also overview from each WP, but then each partner will chose if and how to present their scientific results. Volker mentioned that for the Cebama project, this kind of final conference was held also in conjunction with an international open conference, and the experience was good.

Due to the different nature of the meeting the proceedings should contain short abstracts (no extended abstracts with EUG review) to allow focus on other reporting and writing tasks at the end of the project. There are several reports, as deliverables, and we are also aiming to write scientific papers. It has been disused within ExCom that one way to get papers out at the end of the project is to prepare papers to be submitted together to an Open Access journal.

#### 1.4 Decisions

No issues for decisions were raised by ExCom.

#### 1.5 Other business

Paul Carbol raised the issue of the JRC delays and that there will be less than 12 months for the experiments that have not yet started. We need to discuss to how to handle this and one possibility could be extended agreement. A similar situation occurred in First Nuclides, where JRC could deliver the final results after the official project end date.

Further discussions concerned how data should be delivered to the modellers and what they need. JRC and Eurecat can deliver data as they become available, even if it is not final. WP5 will contact the other work packages to establish how the data should be delivered. Lara said they will initiate the interaction in the coming months, and before that have new look at the excel file (Agreement of conditions) that was set up in the beginning of the project. There was a brief discussion, initiation by Joan de Pablo on if perhaps a model could be set up and then afterwards use data to validate the model. There were some arguments against this, and the discussion had to be cut short to allow the EUG to have time to provide their feed back.

#### 1.6 Next meeting

Decision of dates is postponed due to Covid-19.

End of meeting.

Appendix 1

Time: 16:15-16:45, April 23, 2020

Place: Videoconference

Expected Partcipants: Representatives from all members of the General Assembly (Beneficiaries of the DisCo project)

## Agenda

Agenda for this meeting - Comments, additions, any other business?

#### Information from the Coordinator team:

\*Deliverables & Milestones: submitted & upcoming, including expected publications \*Payment plan & Upcoming EC Reporting \*Report from Group training at JRC postponed

#### **Delays relative to Annex I.**

#### **Discussions on final meeting**

**Decisions:** Any decisions required based on issues escalated through ExCom, or based on what has been discussed at this meeting.

#### Other business

Next meeting

## Appendix 2

Article	Official publication date + WP links
Maier, A.C.C., Kegler, P., Klinkenberg, M., Baena, A., Finkeldei, S., Brandt, F. and Jonsson, M., 2020. On the Change in UO 2 Redox Reactivity as a Function of H 2 O 2 Exposure. Dalton Transactions	(Jan 2020). *WP2&4
Kerleguer, V., Jégou, C., De Windt, L., Broudic, V., Jouan, G., Miro, S., Tocino, F. and Martin, C., 2020. The mechanisms of alteration of a homogeneous U0. 73Pu0. 27O2 MOx fuel under alpha radiolysis of water. Journal of Nuclear Materials, 529, p.151920	(Feb 2020), *WP2,4 & 5
Fidalgo, A., Roth, O., Puranen, A., Evins, L., & Spahiu, K. (2020). Aqueous leaching of ADOPT and standard UO2 spent nuclear fuel under H2 atmosphere. MRS Advances, 5(3-4), 167-175. doi:10.1557/adv.2020.69	(Jan 2020) *WP3
Riba, O., Coene, E., Silva, O., & Duro, L. (2020). Spent fuel alteration model integrating processes of different time-scales. MRS Advances, 5(3-4), 159-166. doi:10.1557/adv.2020.51	(Jan 2020) *WP5
Cordara, T., Smith, H., Mohun, R., Gardner, L., Stennett, M., Hyatt, N., & Corkhill, C. (2020). Hot Isostatic Pressing (HIP): A novel method to prepare Cr-doped UO2 nuclear fuel. MRS Advances, 5(1-2), 45-53. doi:10.1557/adv.2020.62	(Jan 2020) *WP2
Curti, E. and Kulik, D.A., 2020. Oxygen potential calculations for conventional and Cr-doped UO2 fuels based on solid solution thermodynamics. Journal of Nuclear Materials, 534, p.152140	(June 2020) *WP5