

# Minutes of MGT System Integration Meeting

14 December 2015, Teleconference

## Attendees:

<b>Andreas Huber</b>	DLR
<b>Giuseppe Messina</b>	ENEA
<b>Ignacio Lescano</b>	ETN
<b>Ugo Simeoni</b>	ETN
<b>Peter Breuhaus</b>	IRIS
<b>Mario Ferrari</b>	UNIGE
<b>Luca Ratto</b>	UNIGE
<b>David Sánchez</b>	Universidad de Sevilla
<b>Ward de Paepe</b>	Vrije Universiteit Brussel

### 1. Welcome and Introduction

I. Lescano opened the meeting and welcomed the participants. He introduced the system integration document created by P. Breuhaus based on the input of the working group members and presented the main topics for discussion.

### 2. Renaming the Working Group

I. Lescano proposed to change the name of the working group from Cycle to System Integration. He explained that other group has suggested specific tasks that were more related to overall configuration and that could fit better within the cycle group. D. Sánchez pointed out as well that the current document already covers system integration challenges and therefore it is reasonable to change the name. The working group agreed on this.

### 3. System Integration Vision Document

P. Breuhaus reviewed the System Integration document. D. Sánchez suggested splitting the discussion in two main points: content and format. He pointed out that most of the information should be available but the way it's presented would depend on the aim of the document. P. Breuhaus answered that the first goal is to collect the different topics that are of interest for the MGT community and the second goal would be to prioritise them. I. Lescano agreed with P. Breuhaus and stated that the documentation would help to highlight to the European Commission and the community the potential of MGT in the future energy market. He also added that the document should clarify the future targets and identify the key tasks to be performed in order to achieve those targets. U. Simeoni pointed out that close cooperation with the international energy agency should be sought to present a report to the RHC platform in order to include MGT targets in the next EU work programme.

P. Breuhaus stated that in order to show the potential of the MGT to the commission it is essential to describe the current state of art of the MGT. U. Simeoni agreed and highlighted that other working groups have already performed this task. W. de Paepe suggested that the different challenges should be identified and link each solution to its target issue in order to show how MGT can serve the energy generation in the future. I. Lescano commented that the MGT global matrix focuses exactly on indicating those kinds of relationships. D. Sánchez suggested including in the state of art how efficient MGT could currently be, which different cycles could be implemented today, if it is realistic to have intercooled or reheated engines nowadays, etc...

D. Sánchez suggested splitting the state of the art in two sections: power generation and CHP. He mentioned that for example there is a market niche for auxiliary power generation for emergency operations that would not need heat generation but quick start ups, small footprint and fuel flexibility. He offered his help in elaboration this section of the documentation.

D. Sánchez asked about the length of the document. U. Simeoni answered that the summary would be about 70 to 100 pages, as it's the case for the other roadmaps available for different technologies. However, this document will also serve as a source for developing shorter position papers in specific challenges.

#### **4. Conclusions and next steps**

I. Lescano will circulate the formatted document and the matrix for each partner to make their contribution in the pending sections. Additionally, it was agreed to consult if any intellectual property would prevent the working group to share the documentation on Dropbox.

This would allow having a second iteration reviewed by the partners in January 2016. A follow-up teleconference could be set early next year to finalise the document.

#### **Annex I: Action list**

<b>Action Owner</b>	<b>Description</b>	<b>Deadline date</b>
ETN	To share all the documents with the working groups	22 <sup>th</sup> December 2015
ETN	To ask the partners about potential Intellectual Property issues	11 <sup>th</sup> January 2016
All	To provide comments on the task descriptions. To collaborate in the elaboration of a state of the art section. To provide comments on the main challenges addressed. To identify potentially missing challenges or tasks. To complete the System Integration Matrix.	15 <sup>th</sup> January 2016