

HIPS-NET STATUS REPORT YEAR 8

“ESTABLISHING A PAN-EUROPEAN UNDERSTANDING OF ADMISSIBLE HYDROGEN CONCENTRATION IN THE NATURAL GAS GRID”

This status report summarises HIPS-NET activities throughout the preceding year and gives an overview on the spending of financial means. The eighth network year commenced officially in October 2020 and finished in September 2021.

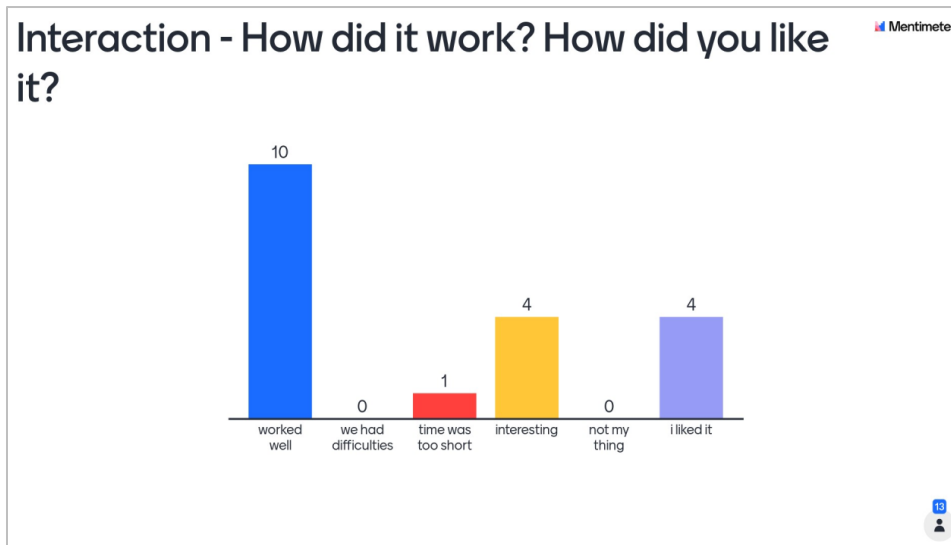
1. DBI, supported by HIPS-NET partners, issued **newsletters** to inform on latest available knowledge around the core topics:

- Gas turbines and engines
- Porous underground gas storage
- Steel CNG1 vehicle tanks
- Natural gas as working medium / interconnection of different industries
- Cross border transmission
- Safety characteristics of H₂/natural gas blends
- Energy metering
- Standardisation, regulatory framework
- Pure hydrogen infrastructure

We additionally kept a minor focus on the general development of hydrogen projects/strategies, power-to-gas, and further topics around the utilisation of (renewable) hydrogen.

Since Anja left us this year, we started late with sending out the newsletter. However, we have made every effort to make up for this delay. Please excuse this delay. Anja has supported the network very long and intensively and we hope we can fill the gap she left behind. We agreed in the HIPS-NET workshop in June 2019 to switch the interval of the newsletters from quarterly editions to every two months with shorter newsletters (about four articles). We will continue to follow this approach. This year we published five newsletters (newsletter #31 – newsletter #35) with a total of 25 articles. Newsletter #31 consisted of eight articles; therefore, it can be counted as two newsletters. Consequently, we have reached the agreed scope (per number of articles) with the newsletter in December 2021.

2. The **annual meeting in June 2021** was special again, due to Covid19. Josephine and Madlen organised an online meeting with zoom, with an interactive part and surveys with Mentimeter. Gert guided us through the 2 days' meeting with support of Robert, Marc, Huib, Stefan, Isabelle (presentations) and Alexandra, Adriaan, Eva, Elbert, Kees, Christian (moderation of the discussion groups). Thank you to everyone. And thank you for the feedback; we have learned something again.



The workshop presentations were disseminated between the partners and uploaded in the members' area of the HIPS-NET website.

Additional scope / tasks: The survey during the workshop revealed ideas that are stronger supported by the members.

- ⇒ All core topics are interesting and will be maintained
- ⇒ New core topic "education and certification of operators" will be tried out
- ⇒ We will try to find enough new partners and if that does not work out, we will raise the membership fee if necessary.
- ⇒ Workshop 2022: proposal was a meeting in Brussels over two days with an informal dinner in between, a hybrid meeting and a joint visit of a demonstrator.

3. Additional Scope | Activities around the **HIPS-NET website** are as usual. We did not give it special attention and mainly updated the website with (new logo, new PtG-map, current partners and documents in the Members' Area, etc). The HIPS-NET **website** supports the public recognition and provides a base for the documentation of newsletters, presentations, status report, etc. It has a public part with general information about HIPS-NET which is kept rather simple to provide necessary information. The other part, the members' area, is secured by individual login and password. The members' area contains several documents for download, such as newsletters, publications, presentations, reports and the Power-to-Gas database. The network is prominently displayed with a link on <http://gerg.eu/>. The website address is <http://www.dbi-gruppe.de/hips-net.html>.

UPDATE: We updated the **Power-to-Gas database** (worldwide) again with intensive research. We will present the updated map in the workshop 2022.



This interactive map reveals further information as soon as you scroll in and click on single projects. Thank you for the feedback we received so far. We added the suggested changes. If you have additional information or want to change anything, please send an email to josephine.glandien@dbi-gruppe.de.

- 4. Annual Budget:** HIPS-NET is supported by 2,000 €/a per partner. The network had 39 partners in 2020/2021. VCI and Cadent left us in October 2021 due to Corona effects. The network had an annual budget in the eighth year (2020/21) of 78,000 € (39*2,000 €).

The overview of the **budget spending** is summarised in annex A.

5. Year 9 | Working Plan

Mandatory responsibilities

- Issuing up to 6 newsletters per year in the past (in total with 24-30 articles per year)
- Annual workshop in June 2022 – hopefully in Brussels
- Addressing open R&D subjects and communication e.g. to the EC
- Preparing a short status report

Additional scope (depending on available budget)

- Maintaining HIPS-NET website
- Maintaining contact to CEN/CENELEC

6. Compendium of 8th Project Year Newsletters

We attached to this brief status report a table of content of all newsletters of the previous year with active links to the articles in the newsletters. We hope you find this compilation useful in case you search for distinct information regarding our network topics.

Last but not least

We, Gert, Ruven, Josephine and Charlotte – the organisational HIPS-NET team – thank you as partner for very much for your continuous support in the network. Please feel always free to send us your thoughts on the network, information you wish to share about your ideas and projects you perform or have heard of.

ANNEX A:

HIPS-NET - Overview of Budget Spending
Including Outlook

Category	Item	Pers.	Time required	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	running 2021/22	planned 2022/23
Income	Partner [No.]			30	30	32	35	36	39	40	39	40	43
	Membership Fee			2.000 €	2.000 €	2.000 €	2.000 €	2.000 €	2.000 €	2.000 €	2.000 €	2.000 €	2.000 €
	Annual Budget			60.000 €	60.000 €	64.000 €	70.000 €	72.000 €	78.000 €	80.000 €	78.000 €	80.000 €	86.000 €
Expenses													
Administration	Agreements (2013/14)		15 days / year	8.250 €	- €	- €	- €	- €	- €	- €	- €	- €	- €
	Agreements (2014/15)		10 days / year	- €	5.600 €	- €	- €	- €	- €	- €	- €	- €	- €
	Agreements (2015/16)		5 days / year	- €	- €	2.850 €	- €	- €	- €	- €	- €	- €	- €
	Agreements (2016/17)		3 days / year	- €	- €	- €	1.740 €	- €	- €	- €	- €	- €	- €
	Agreements (2017/18)		2 days / year	- €	- €	- €	- €	1.200 €	- €	- €	- €	- €	- €
	Agreements (2018/19)		1 days / year	- €	- €	- €	- €	- €	610 €	- €	- €	- €	- €
	Agreements (2019/20)		1 days / year	- €	- €	- €	- €	- €	- €	630 €	- €	- €	- €
	Agreements (2020/21)		1 days / year	- €	- €	- €	- €	- €	- €	- €	700 €	- €	- €
	Agreements (2021/22)		1 days / year	- €	- €	- €	- €	- €	- €	- €	- €	700 €	700 €
	Invoicing		1,5 days / year	825 €	840 €	855 €	870 €	900 €	915 €	945 €	1.050 €	1.050 €	1.050 €
	Miscellaneous (incoming banking fees)		-	19 €	25 €	25 €	25 €	25 €	25 €	25 €	25 €	26 €	26 €
Administration	Total			9.094 €	6.465 €	3.705 €	2.635 €	2.125 €	1.550 €	1.600 €	1.775 €	1.776 €	1.776 €
Promotion	External Presentation of the Network		3 days / year	1.650 €	1.680 €	1.710 €	1.740 €	1.800 €	1.830 €	1.890 €	1.500 €	2.100 €	2.100 €
	Acquisition of New Partners		5 days / year	2.750 €	2.800 €	2.850 €	2.900 €	3.000 €	3.050 €	3.150 €	- €	3.500 €	3.500 €
Promotion	Total			4.400 €	4.480 €	4.560 €	4.640 €	4.800 €	4.880 €	5.040 €	1.500 €	5.600 €	5.600 €
Website	Creation (incl. Subcontracting)		10 days	- €	- €	7.700 €	- €	- €	- €	- €	- €	- €	- €
	Maintenance incl. minor adoptions 2016		6 days / year	- €	- €	3.420 €	- €	- €	- €	- €	- €	- €	- €
	Ongoing Maintenance		5 days / year	- €	- €	- €	2.900 €	3.000 €	3.050 €	3.150 €	3.500 €	3.500 €	3.500 €
Website	Total			- €	- €	11.120 €	2.900 €	3.000 €	3.050 €	3.150 €	3.500 €	3.500 €	3.500 €
Editorial Work	Editorial Meeting	3	0,5 days / newsletter	3.300 €	3.360 €	3.420 €	3.480 €	3.600 €	4.575 €	5.670 €	6.300 €	6.300 €	6.300 €
	Research and Writing of Articles		1,5 days / article	26.400 €	26.880 €	27.360 €	27.840 €	28.800 €	29.280 €	30.240 €	33.600 €	33.600 €	33.600 €
	Proofreading of Articles		0,5 day / article	8.800 €	8.960 €	9.120 €	9.280 €	9.600 €	9.760 €	10.080 €	11.200 €	11.200 €	11.200 €
	Layout Newsletter		2,0 days / newsletter	4.400 €	4.480 €	4.560 €	4.640 €	4.800 €	6.100 €	7.560 €	8.400 €	8.400 €	8.400 €
	Proofreading Newsletter	2	0,5 day / newsletter	2.200 €	2.240 €	2.280 €	2.320 €	2.400 €	3.050 €	3.780 €	4.200 €	4.200 €	4.200 €
Editorial Work	Total			45.100 €	45.920 €	46.740 €	47.560 €	49.200 €	52.765 €	57.330 €	63.700 €	63.700 €	63.700 €
Workshop	Preparation		10 days / year	5.500 €	5.600 €	5.700 €	5.800 €	6.000 €	6.100 €	6.300 €	7.000 €	7.000 €	7.000 €
	Realisation	3	1,5 days / year	2.475 €	2.520 €	2.565 €	2.610 €	2.700 €	2.745 €	2.835 €	3.150 €	3.150 €	3.150 €
	Location Rent and Lunch		-	-	GERG	GERG	GERG	GERG	GERG	- €	- €	GERG	GERG
	Catering (Casual Dinner)		-	1.200 €	998 €	GERG	- €	1.100 €	1.100 €	- €	- €	1.100 €	1.100 €
	Travel Expenses	3	-	1.152 €	1.154 €	1.200 €	414 €	1.200 €	1.200 €	- €	- €	1.500 €	1.500 €
	Follow-up Work		5 days / year	2.750 €	2.800 €	2.850 €	2.900 €	3.000 €	3.050 €	3.150 €	3.500 €	3.500 €	3.500 €
Workshop	Total			13.077 €	13.072 €	12.315 €	11.724 €	14.000 €	14.195 €	12.285 €	13.650 €	16.250 €	16.250 €
Annual Status	Creation of the Report		1 days / year	1.650 €	1.680 €	570 €	580 €	600 €	610 €	630 €	700 €	700 €	700 €
Annual Status	Total			1.650 €	1.680 €	570 €	580 €	600 €	610 €	630 €	700 €	700 €	700 €
Subcontracting	Service Fee + Travel Expenses		-	14.480 €	10.437 €	- €	- €	- €	- €	- €	- €	- €	- €
Subcontracting	Total			14.480 €	10.437 €	- €	- €	- €	- €	- €	- €	- €	- €
Total	(Expenses)			87.801 €	82.053 €	79.010 €	70.039 €	73.725 €	77.050 €	80.035 €	84.825 €	91.526 €	91.526 €
Result	(Income - Expenses)			-27.801 €	-22.053 €	-15.010 €	-39 €	-1.725 €	950 €	-35 €	-6.825 €	-11.526 €	-5.526 €