



DISPERSE

Electronics for spatially distributed sensors and transducers arrays

Labeled in PENTA, a EUREKA cluster, Call 1

PENTA Project Number 16012

D6.5 – Public report on state of the art and project results

Due date of deliverable: M36

Start date of project: 1 February 2017

Duration: 36 months

Organisation name of lead contractor for this deliverable: Philips

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Status: Draft

Version number: 1.0

Date: January 24, 2020

Doc reference: DISPERSE_Deliverable_D6.5_Public_report_of_state_of_the_art_and_projects_results_V1.0.docx

Work Pack./ Task: WP 6

Description:
(max 5 lines) DISPERSE has developed technology improving on the state-of-the-art before project start.

Nature:	<Use one of these codes: R =Report, P =Prototype, D =Demonstrator, O =Other>		
Dissemination Level:	PU	Public	PU
	PP	Restricted to other programme participants	
	RE	Restricted to a group specified by the consortium	
	CO	Confidential, only for members of the consortium	

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DOCUMENT HISTORY

Release	Date	Reason of change	Status	Distribution
V0.1	20/11/2019	Conceptualization and interview by AENEAS	Draft	AENEAS, PL
V0.2	10/01/2020	Outline (meeting at KU Leuven)	Draft	
V0.3	10/01/2020	Recording at KU Leuven	Draft	Cochlear, KU Leuven, MinDCet
V0.4	16/01/2020	Recording at Philips	Draft	Philips
V0.5	17/01/2020	Recording at Sorama (including Sound Intelligence)	Draft	Sorama Sound Intelligence
V0.6	21/01/2020	Recording at Astron	Draft	ASTRON Technobis
V0.7	24/01/2020	Recording at GTX medical	Draft	GTX medical, KU Leuven
V0.8	23/01/2020	Text update	Concept	DISPERSE PMT
V1.0	24/01/2020	Approved by PMT after clerical changes	Submitted	PENTA Office

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1. LinkedIn

In order to maximize the dissemination impact of the advances with respect to state-of-the-art delivered by DISPERSE multiple LinkedIn posts have been made with short videos focussing on one specific topic in DISPERSE. All posts refer to the DISPERSE project website and the PENTA program website.

Further they include a link to the video in full HD quality on YouTube.

The series of posts have been kicked-off by a teaser. In this case it was a link to YouTube. Later posts had embedded video with closed captions to improve impact. Posting was intentionally spread over time.

Mark Van Helvoort
Program Manager Public-Private Partnerships Magnetic Resonance Imaging
1w • 🌐

All good things must come to an end and so does the **#DISPERSE** project. On January 31, 2020 the final review will take place at the University Hospital Leuven. We are looking forward to present our excellent results and are preparing the demonstrations. This video is a small appetizer.

The DISPERSE project has optimized the workflow for **#MRI** scanning of patients with multiple **#implants** by developing electronics for spatially distributed **#sensor** and **#transducer** arrays. The innovation efforts exploit synergies between the health, space and smart city domains. The DISPERSE project, "Electronics for spatially distributed sensor and transducer arrays", has been executed under the **#EUREKA #PENTA** Program. More information: www.disperse.eu and <https://lnkd.in/e22hQv5> and **AENEAS Association**.

DISPERSE Review Preparation at the University Hospital Leuven
youtube.com

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2. YouTube

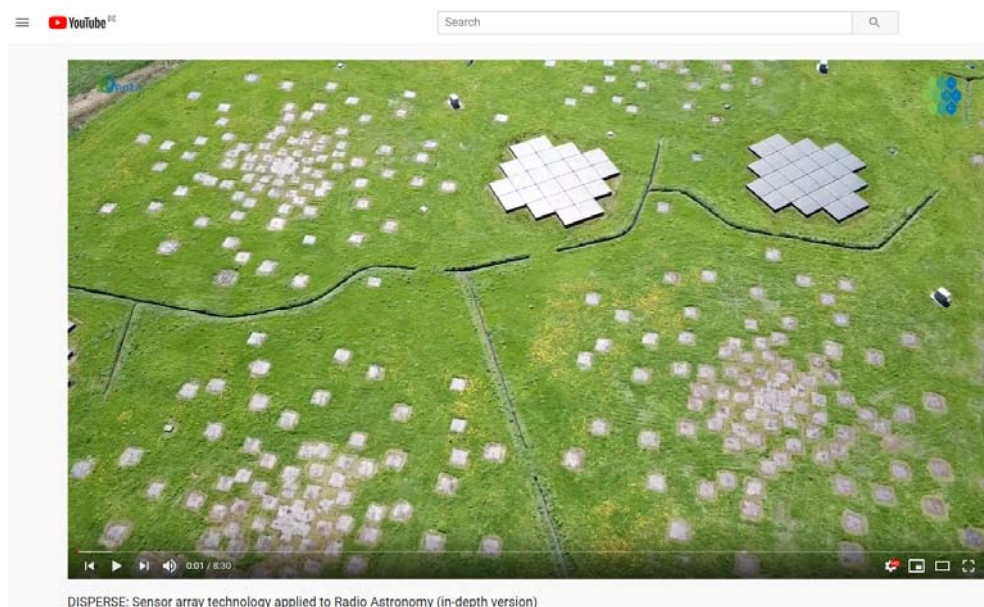
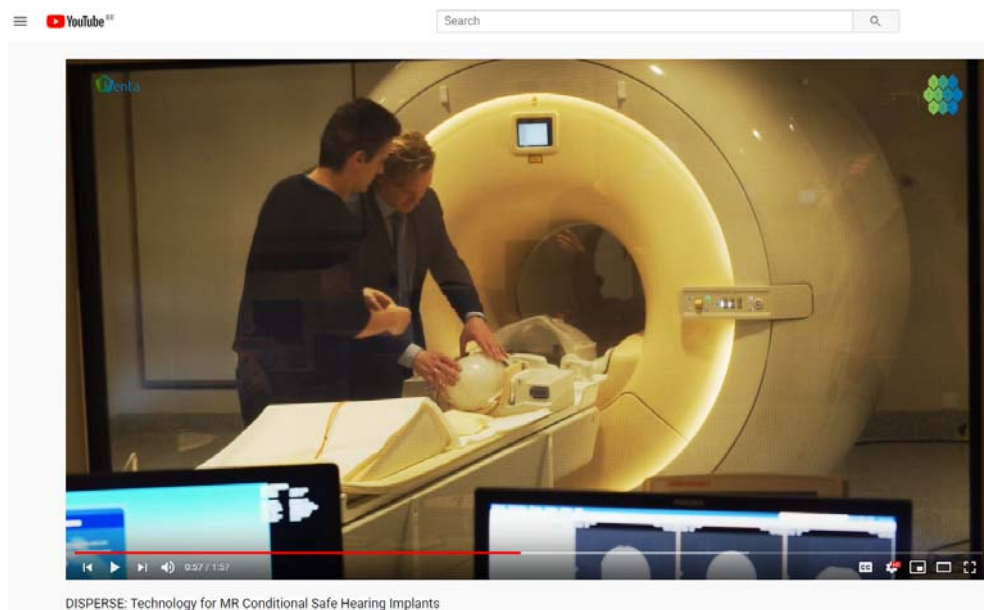
Advised by the AENEAS communication director, the videos posted on LinkedIn were time constricted. All videos also have been posted to YouTube, but where applicable, without time constraint. The quality on YouTube is much better (full HD). In addition they are searchable for future reference. Closed captions have been added in English to all videos.

For convenience reasons all videos have been added to a playlist dedicated to DISPERSE:

<https://www.youtube.com/playlist?list=PLxboul7cw7wykGYMBQwDem6GlnrwtgQHR>

The posting was intentionally spread over time. All videos were referred to on LinkedIn. AENEAS is working on the formal DISPERSE video in PENTA format. When available this video will be added to the play list.

Examples of individual videos:



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3. Website

From the start of the project, DISPERSE has maintained a website. This website will be maintained at least till one year after project end. The public deliverables are downloadable from the website and references to other dissemination materials are given.

Website: www.disperse.eu



Joris, P., "MR Patient Preparation Flowchart", January, 2019.

Fierens, G., Verhaert, N., Benoudiba, F., Bellin, M-F., Ducreux, D., Papon, J-F., Nevoux, J. (2019). "Stability of the standard incus coupling of the Carina middle ear actuator after 1.5T". Under review PLoS One, 2019.

Fierens, G., Verhaert, N., Benoudiba, F., Bellin, M-F., Ducreux, D., Papon, J-F., Nevoux, J. (2019). "Coupling Stability of Carina Middle Ear Actuator After 1.5T MRI." 7th International Congress on Bone Conduction Hearing and Related Technologies, Miami Beach, Florida, USA, 11 Dec 2019-14 Dec 2019.

Helvoort, M. van, "DISPERSE", European Forum for Electronics and Systems, Helsinki, Finland, November 19-21, 2019.

Helvoort, M. van, "Resonating Public Private Partnerships", European Alliance Summit, November 14, 2019.

DISPERSE Consortium, "Recommendation to standardization bodies", public deliverable, October 15, 2019.

Fierens, Guy, Walraevens J., Paoles E., Peeters R., Glorieux C., "Design of a head phantom for multi-implant artefact testing in MRI", abstract no. 6, ISMRM workshop on MR Safety: Ensuring Safety from First Principles to Best Practices. Utrecht, The Netherlands, September 20-22, 2019

Harberts, Dick, "LF Scattering of a Cylindrical Shield in an Alternating Magnetic Field", EMC Europe 2019, Barcelona, Spain, September, 2019

Brink, Johan van den, "Thermal Effects Associated with RF Exposures in Diagnostic MRI: Overview of Existing and Emerging Concepts of Protection," Concepts in Magnetic Resonance Part B, vol. 2019, Article ID 9618680, 17 pages, June 17, 2019. <https://doi.org/10.1155/2019/9618680>.

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