



# 5G HEART

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## 5G-HEART -PROJEKTI JA TERVEYSPALVELUIDEN KOKOILUT 5G- TESTIVERKOISSA

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*Teknologian tutkimuskeskus VTT Oy*

5G Momentum – 5G terveyden ja  
hyvinvoinnin palveluissa

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5G HEALTH AQUACULTURE AND TRANSPORT VALIDATION TRIALS

- Project overview
- Partners
- Test facilities
- Vertical domains
- Healthcare vertical
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- One of the 8 projects funded in the EC's Horizon 2020 WP for "Advanced 5G validations trials across multiple vertical industries".
- Covers services from healthcare, transport and aquaculture verticals.
- Coordinated by VTT.
- Duration: 36 months (6/2019-5/2022)
- Consortium: 21 partners from 7 countries

# Partners

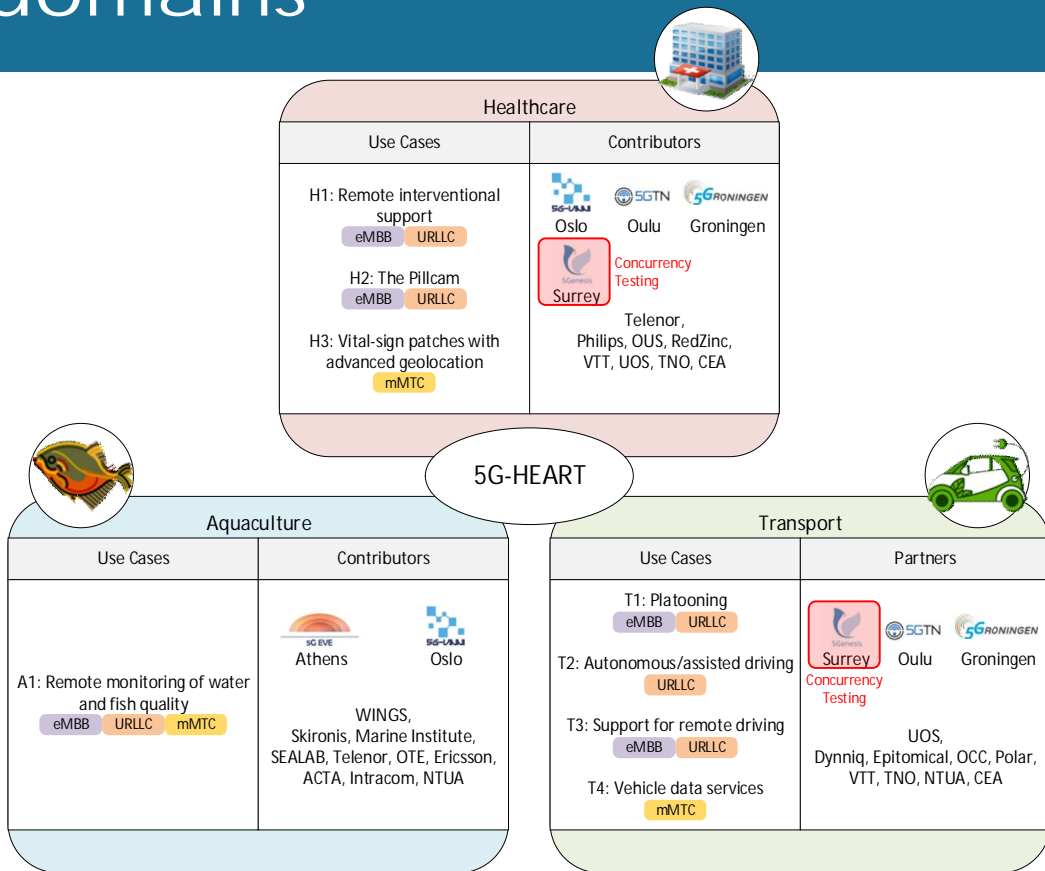
Partner Type	Partner	From
Research	VTT	FI
	Marine Institute	IE
	OUS	NO
	TNO	NL
	UOS	UK
	NTUA	EL
	CEA	FR
LE	Telenor	NO
	Intracom	EL
	OTE	EL
	Ericsson	EL
	Philips	NL
	Dynniq	NL
SME	Polar	FI
	Skironis	EL
	SEALAB	NO
	WINGS	EL
	RedZinc	IE
	ACTA	EL
Other	Epitomical	UK
	OCC	UK

- Finland: VTT, POLAR
- France: CEA
- Greece: Intracom, OTE, ERICSSON, SKIRONIS, NTUA, WINGS, ACTA
- Ireland: RedZinc, Marine Institute
- Norway: Telenor, Univ. Hosp. Oslo, Sealab
- Netherlands: Philips, Dynniq, TNO
- U.K.: Univ. Surrey, Epitomical, OCC



Pilot site:	Oslo, Norway	Surrey, UK	Athens, Greece	Oulu, Finland	Groningen, Netherlands
Verticals:	Healthcare, Aquaculture	Healthcare, Transport	Aquaculture	Healthcare, Transport	Healthcare, Transport
Test facility:	5G-VINNI (ICT-17)	5GENESIS (ICT-17)	5G EVE (ICT-17)	5GTN (national)	5Groningen (national)
5G-HEART use cases:	H1, H2, H3, A1	H3, T1, T2, T3, T4	A1	H1, T2	H1, T2
Use case categories:	eMBB, URLLC, mMTC	eMBB, URLLC, mMTC	eMBB, URLLC, mMTC	eMBB, URLLC	eMBB, URLLC
Involved partners:	Telenor	UOS	OTE, Ericsson, WINGS	VTT	TNO

# Vertical domains



- Use case H1: Remote interventional support
  - Use of advanced, rich media communications in the context of remote monitoring, education and robotics in patient diagnostics and treatment.
- Use case H2: The Pillcam
  - Colon capsule may be an alternative to colonoscopy for early detection of colon cancer with high mortality.
- Use case H3: Vital-sign patches with advanced geo-location
  - Direct-to-Cloud, disposable, vital-sign patches to enable continuous monitoring of ambulatory patients, anytime and anywhere.



# Stakeholder impact



<u>Health Impact</u>	<u>Transport Impact</u>	<u>Aquaculture Impact</u>
More Efficient Clinical Processes. Improved Patient Pathways & Outcomes. Reduced Hospital OPEX. Reduce the impact of geography & economy on the quality of health care globally	Public Safety in Platooning Autonomous & Assisted driving, New business models. Standards impact for high-level automated road transport	Better Food Production in Europe Advanced Production, Autonomous Feeding Fish Health, Farm Management, Enhanced production efficiency & quality

Health Cluster      Transport Cluster      Aquaculture Cluster

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Telecom Cluster

Research

<p>Health</p>	<p>Transport</p>	<p>Aquaculture</p>
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# THANK YOU FOR YOUR ATTENTION



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