



HS4U & MOSES Synergy Meeting

WHITE RESEARCH

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Funded by the European Union

Funded by the European Union's Horizon Europe Research and Innovation Actions programme under grant agreement No 101069937.

HS4U – Project



Introducing HS4U

- [Healthy Ship 4 U \(HS4U\)](#) is a cross-national 3-year long Research and Innovation Action (01/09/2022-31/08/2025), supported by the European Union within the framework of the Horizon Europe programme
- [Multidisciplinary consortium](#) of [22 partners](#) from 8 different countries
- Its aim is to [develop and demonstrate holistic ship design solutions](#) that will facilitate the early detection, prevention, and mitigation of general health conditions, pandemic crises and communicable disease outbreaks in large passenger and cruise ships by ensuring [healthy ship operations](#) and [safe return to port](#) during a health emergency



www.hs4u.eu




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HS4U – Approach: 4 Unique Pillars

Understanding the 4 Unique pillars of HS4U

To tackle this challenge, HS4U is based upon **4 Unique Pillars**:

 <p>Societal/human factor</p> <p>The HS4U project will create a collaborative digital framework for the live interaction of humans and Internet of Things edge devices by using co-robotics and Artificial Intelligence mechanisms.</p>	 <p>Legislation factor</p> <p>The HS4U team will develop best practices and policy recommendations to be updated according to emerging needs to tackle potential pandemics and public health outbreaks.</p>	 <p>Environmental factor</p> <p>HS4U will conduct the current condition analysis to offer high quality environmental conditions through smart systems onboard. This will empower the conceptual design of functional elements of cruise ships and will activate the prevention, mitigation, and management of virus outbreaks.</p>	 <p>Technological factor</p> <p>HS4U will focus on modularity for co-robotics with the aim to identify where is the virus outbreak on naval architecture and marine engineering plans. This will include the stream handling of big data on biomedical, health, behavioural and environmental modeling.</p>
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1. **Societal/human factor:** Creation of a digital framework for human and Internet of Things (IoT) edge devices' live interaction using co-robotics and Artificial Intelligence (AI) mechanisms
2. **Legislation factor:** Developing best practices & policy recommendations to be updated according to emerging needs in times of health crises
3. **Environmental factor:** Conducting live condition analysis to offer high-quality environmental conditions through smart systems onboard
4. **Technological factor:** Focusing on modularity for co-robotics with the aim to identify the specific location of the virus outbreak on naval architecture and marine engineering plans

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HS4U – Objectives



Main Assets

- Creation of a Collaborative Digital Framework (CDF)
- Development of a Viral Detection Sensor (VDS)
- Complete solutions for the training of ship's crew based on multi-player gaming, embedding realistic role-playing and context
- Development of a real-life demonstrator (robot cabin)



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HS4U - Joint Disseminations Actions

- Mutually reference of our projects on our respective websites;
- Mutually support each other through SMAs ([LinkedIn](#), [Facebook](#), [Twitter](#) and [YouTube](#));
- Mutual reference on our next bi-annual Newsletter;
 May I invite you to subscribe to our newsletter - <https://hs4u.eu/>;
- Present each project in potential future project events/webinars/workshops or any other event organised by MOSES/HS4U



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