

# COULD BLOCKCHAIN HELP REUNITE SEAFARERS WITH THEIR FAMILIES?

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## COVID-19 and the maritime industry

COVID-19 has had an unprecedented impact on life across the world. As of date, the virus has infected approximately 107 million people worldwide and has caused over 2.3 million deaths [1].

Throughout the pandemic, the maritime industry has done a tremendous job in ensuring critical supply chains and the delivery of essential cargoes. The 1.6 million seafarers worldwide in co-ordination with maritime authorities and other organizations, have worked tirelessly in service of the general public [2].

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## A humanitarian crisis

Hundreds of thousands of seafarers remain stranded at sea, many months beyond their contracted time, causing them immense mental strain and fatigue which in turn is a ticking time-bomb for maritime safety [3].

Travel restrictions imposed by governments have exacerbated this problem of crew changes turning this issue into a snowballing humanitarian crisis [4]. There are calls to designate seafarers as essential workers, to exempt them from specific COVID-related travel restrictions, and to grant them priority access to vaccinations [5].

*There are many examples of the situations endured by the hundreds of thousands of seafarers affected by the virus outbreak. A recent example featured by BBC described the heartbreaking story of sailor Abhiram Oak, who missed the birth of his first daughter because he could not sign-off due to COVID-19 restrictions, even after his shipboard contract had ended [6].*

There seems to be no easy solution in sight to this rather complex problem of tracking the seafarers' health credentials within the ever changing global pandemic context.

## THE N-CAP & PCR TESTS

The *Navozyme - Certificate Authentication Platform* (N-CAP) allows maritime administrations and multiple stakeholders like owners, training institutions and manning agencies to manage seafarers' STCW and non-STCW certificates conveniently within a secured permissioned blockchain network. The seafarer has all her certificate information within her control and the credentials are always available on her mobile. QR codes linked to the blockchain hashes enable anyone, even those not part of the permissioned blockchain, to verify the certificates.

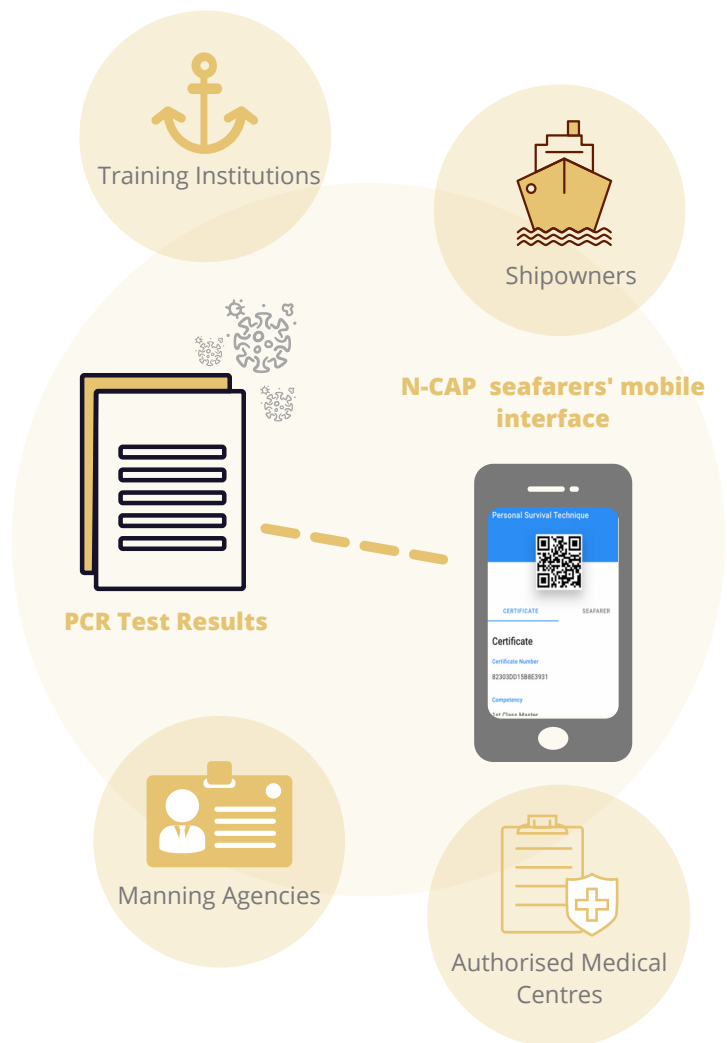
In the global pandemic context, the control and monitoring of the seafarers' COVID-19 test results is a key first step in the direction of creating a *Digital Health Passport*. Since time immemorial, seafarers have carried a *Yellow Book* with a record of their essential vaccinations (e.g. yellow fever) so the *Digital Health Passport* is not conceptually a new idea. What is new is that technology today allows essential data to be accessed in real time without compromising the seafarer's medical data privacy. Blockchain technology offers an elegant solution for this use-case. [7].

## OUR COMMITMENT

**Seafarers have been the invisible heroes of this pandemic. As a company founded by seafarers it is Navozyme's honour and responsibility to provide innovative solutions that raise the safety, the productivity, the reputation, and reduce the carbon-footprint of the global maritime industry.**

Authorised medical centres can connect the seafarers' PCR test results to *N-CAP* which secures the credentials for the *Digital Health Passport*. Any external stakeholder like government bodies (e.g. officers at the immigration check points) could easily verify the authenticity of the PCR test results and other relevant information about the seafarers. This technology solution could play a key role in facilitating crew changes globally.

Seafarers stranded on board could be reunited with their families, thanks to blockchain technology. When that happens, the purpose of technology to be an enabler in solving real-world problems would be realised.



## Notes and References

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