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### Reference letter from Lloyd's Register

Lloyd's Register is a leading provider of classification and compliance services to the marine and offshore industries, helping our clients in over 75 countries worldwide to design, construct, operate, extend, and decommission their assets safely and in line with environmental regulations. As our company is committed to continuously enhancing the quality of our services, we wanted to develop new IT solutions as well as rethink some of our existing ones and expand the functionality to better serve our business needs. With this objective in mind, in 2018 we started our collaboration with Itransition, impressed with numerous skillfully executed projects in their versatile portfolio.

Itransition was engaged in the development of several independent solutions for vessel design review, load testing, and validation. Some of the solutions were intended to be used by our customers, while others enhanced our internal operations. Across all the projects, Itransition's team quickly immersed themselves in the nuances of the marine and shipbuilding industry and the details and complexities of the business in which the software is used.

To describe each solution in detail, Itransition's team has worked on RulesCalc, which is used by our clients and internal users for vessel structural compliance. RulesCalc is a C++ and C# application that performs calculations that check the compliance of a ship with LR's structural strength design standards, helping with vessel validation and classification. Itransition worked on redeveloping our existing solution from scratch to fully realise our ideas about new functionality. One of the core project goals was to achieve swift performance even when working with large ship plans, and Itransition accelerated ship plan processing from minutes to seconds.

We also collaborated with Itransition on a web-based application to be used by clients and internal users. This is a 3D ship plan viewer that allows users to display vessel plans, perform automatic calculations on ship parameters, review the design, and add suggestions for ship plan improvements. The solution streamlines the process of validating vessel design against Lloyd's Register rules and standards. Itransition was primarily focused on building and maintaining a complex Azure-based microservices architecture of the application, setting up interfaces to enable communication between microservices, and automating DevOps processes. As a result, Itransition's team sped up deployment from 1 day to 30 minutes, significantly accelerating the CI/CD pipeline. We are currently at the stage of testing and gradually introducing the solution into our workflows, but we are already impressed with the technical realisation of the project as the microservice structure is easily scalable and maintainable.

Furthermore, Itransition's team worked on developing for client and internal users that streamlines the process of ship classification and design compliance. The solution helps determine vessel endurance by calculating parameters of various ship parts (plates, stiffeners) and how they will be affected under stress. This functionality enables us to test vessel safety in conditions that emulate the real ones it will experience during operation. The C++ and C# solution calculates the loads to be applied to a finite element model representing the ship structure, which is then processed using a finite element solver to calculate the stress response of the vessel. This is then checked for compliance with LR's



Rules and Procedures. On this project, Itransition has demonstrated expert knowledge of a technologically advanced tech stack, having applied it to a complex system.

Throughout our collaboration, Itransition helped us polish the project management of the development to ensure an efficient and effective process. They selected the best agile approaches, set up Scrum processes, and organised knowledge sharing sessions, coaching our teams on how to leverage the framework to the utmost advantage for our SDLC pipeline. In addition to project management guidance, their team established software development and code writing practices. All the improvements ensured the solutions were built on a very solid foundation that is aligned with latest industry standards.

Our company has actively collaborated with Itransition, and their team has never failed to impress us. With the highest possible regard, we recommend Itransition as a service provider who can expertly deliver systems of any complexity. They employ versatile tech approaches and platforms to precisely tailor the tech stack to the desired business goals. Having demonstrated outstanding process-management skills, their team can be entrusted with any project requiring exceptional leadership, proactivity, and managerial vision.

Sincerely,

A handwritten signature in black ink that reads "Nathan Lindop".

Nathan Lindop

Software Engineering Manager – Smart Assurance