

## Roll Risk Estimator - MARIN

The International Group is a member of the Maritime Research Institute of the Netherlands (MARIN) Top Tier project. The project has been established to examine and assess the causes of container losses arising from at-sea incidents onboard various sizes of container ships.

The project has been approved by a cross section of industry, academic and government interests and MARIN will produce a report of its findings including recommendations in due course. It is envisaged that the recommendations will eventually lead to operational and technical improvements that should mitigate the risk and underlying causes of container losses at sea.

The MARIN Roll Risk Estimator V1.4 can be downloaded from the MARIN website ([TopTier | MARIN](#)). It indicates combinations of speed, heading and wave period that result in unfavourable tuning of roll motions that should be avoided. It does not give indication of the maximum roll motion, and at which wave height the vessel is vulnerable to adverse rolling must be judged by the master's experience. In addition, it does not address other dangerous ship behaviour like e.g. large vertical accelerations, shipping green water and slamming.