IRClass Commitment to Traditional Technical Judgment and Greek Maritime Growth

P. K. Mishra, Managing Director of the Indian Register of Shipping

P.K. Mishra, Managing Director of the Indian Register of Shipping, emphasizes a "real-world" approach to classification, prioritizing physical surveys over remote alternatives to maintain deep technical partnerships. The interview outlines IRClass's 2026 roadmap, focusing on FuelEU Maritime preparation, AI-enhanced safety frameworks like TMSA 3, and the strategic expansion of "Piraeus-centric" decision-making to support the evolving Greek fleet.

1) As Class societies move toward remote surveys and AI-driven approvals, how are you ensuring that your human force in Piraeus retains the deep, practical expertise needed to provide 'real-world' technical judgment? How do you prevent digital automation from diluting the peer-to-peer technical relationship that Greek shipowners value?

- As a classification society, IRS prefers physical surveys onboard ships, thereby maintaining a peer-to-peer technical relationship with shipboard and shore technical management teams, and values this relationship at its core. During extraordinary circumstances and Force Majeure conditions, in order to keep a ship's certification intact in accordance with classification rules and statutory regulations, IRS may undertake remote surveys in line with IACS UR Z29 and HSSC Guidelines (Res. A,1207 (34)). Among major IACS member classification societies, IRS may be one of the societies that conducts the minimum number of remote surveys. We continue to believe in the traditional approach of 'real world' technical judgement.

In our view, AI driven approvals and digital automation can significantly enhance the efficiency and accuracy of delivering technical services, however, they can never replace physical

interaction and the exchange of technical wisdom.

2) How is your organisation actively supporting Greek shipping companies in managing GHG intensity targets? Are you providing a formal framework for emissions pooling to ensure that older vessels can remain compliant under FuelEU Maritime regulations?

- Indian Register of Shipping is actively supporting the maritime industry, including several Greek shipping companies, in navigating the increasing complexity of GHG intensity regulations. As a Recognized Organization to various major Flag Administrations, IRS carries out verification of SEEMP and Annual IMO DCS-CII, and issues Statements of Compliance. IRS is also an accredited verifier for EU MRV-ETS and provides services in the assessment of monitoring plans and verification of Emission Reports.

While our accreditation for FuelEU Maritime verification is currently in process with the Hellenic Accreditation System (ESYD), we are already assisting clients in their preparation through gap assessments and fuel transition strategies, such as biofuels. IRS has published guidelines for alternative-fuelled vessels, including Methanol, Ammonia, Biofuels, Fuel Cell, LPG, and Battery-powered vessels.

Our approach is to ensure that shipowners, including those operating older vessels, are equipped with practical, forward-looking strategies to remain competitive and compliant. As our FuelEU Maritime accreditation progresses, IRS intends to expand its service portfolio to include verification and potentially structured support mechanisms aligned with market needs.

3) How is your society helping Greek operators implement the TMSA 3 (Tanker Management and Self-Assessment, 3rd Edition) & Dry BMS (Dry Bulk Management Standard) or similar frameworks to move beyond compliance toward a 'zero accident' reality? Are you using predictive analytics to identify 'high-risk' human-factor patterns before they manifest as actual casualties?

- IRS can support Greek tanker and dry bulk operators in implementing TMSA 3 and Dry BMS by moving away from "tick-box" compliance towards risk-based safety management. Through the integration of digital tools, behavioural competency assessments, and predictive analytics, we can help operators move beyond minimum compliance toward a "zero accident" reality.

How IRS can help Implement TMSA 3 & Dry BMS (2026 Context)

- Gap Analysis and Auditing: IRS can provide gap analysis services comparing current Safety Management Systems (SMS) against TMSA 3 and Dry BMS key performance indicators (KPIs) to identify maturity levels.
- Digitalized SMS: IRS can assist operators in transitioning towards digitalised systems, such as the SIRE/TMSA integrated platform, enabling better tracking of safety culture, training, and operational performance.
- Operationalizing Dry BMS: Similar to the established TMSA for tankers, Dry BMS can now be implemented across the Greek dry bulk sector, with partners focusing on key priority areas: Performance, People, Plant, and Process.
- Tailored Consultancy: Consulting firms in Greece can collaborate with IRS to provide hands-on auditing and SMS simplification, tailored to the specific needs of Greek-managed fleets.

Moving Beyond Compliance to "Zero Accidents"

- Behavioural Competency Assessment (BCA): To move beyond compliance, tools such as VR Behavioural Competency Assessments can be used to evaluate how crew behaviours align with TMSA/Dry BMS requirements, focusing on human-centred maritime assessments.
- Safety Culture Training: Greater emphasis can be placed on progressing to higher stages of TMSA, where safety is not merely procedural but a deeply embedded culture with strong crew involvement.
- Unified Maintenance and Safety: Greek operators can adopt unified digital platforms linking class survey requirements, SMS obligations, and SIRE 2.0 readiness into a single maintenance schedule, thereby reducing the risk of human error in managing compliance.

Use of Predictive Analytics for Human-Factor Patterns

Classification societies and their technology partners are increasingly using predictive analytics and AI-driven tools to identify high-risk patterns before incidents occur:

- Human Factor Analysis (HFACS): Data-driven methods are applied to accident reports and operational data using the Human Factor Analysis and Classification System (HFACS) to model human factors and predict accident types.
- Digital Logbooks and Data Mining: Advanced digital logbook platforms (e.g., MORSE) are used to analyse operational data, enabling data-driven decision-making and early identification of potential risks.
- Predictive Risk Modeling: Hybrid methodologies (combining HFACS and Fuzzy Cognitive Maps) are used to analyse causal relationships between human factors, allowing dynamic prediction of human-related risks.
- Machine Learning for Risk Assessment: Machine learning algorithms are employed to analyse historical accident patterns, enabling proactive identification of high-risk areas and targeted intervention before incidents occur.

These efforts are particularly relevant for Greek shipping in 2026, which is navigating a period of significant fleet expansion (over 285 tankers and 156 dry bulk carriers on order) alongside increasingly stringent regulatory pressures.

4) What role do you play in ensuring that Greek shipping companies are not unfairly by regional port state controls that deviate from global IMO standards? How is your society acting as a 'diplomatic' and technical shield for Greek-owned vessels?

- IRS monitors the PSC performance of its fleet, including Greek-owned vessels, on a daily basis and reviews any deficiencies recorded on their technical merit. We communicate promptly with the respective PSC regime where a deficiency is considered unjustifiable and follow up rigorously for its removal from the PSC report. Where required, we also seek the support of our local offices worldwide to engage with PSC officers and facilitate the desired outcome.

5) As Greek shipowners demand greater transparency and speed, how does your digital suite differentiate you from other major societies? Are you prepared to offer better PSC inspections rate, AI-driven automated certification and integrated performance dashboards that proactively identify high-risk technical gaps?

- IRS offers services on par with other major classification societies to support clients, including Greek shipowners, in achieving PSC inspection readiness. This includes providing PSC inspection checklists with tailored items commonly reviewed by various PSC regimes. We maintain a database of deficiencies recorded across PSC regimes for the IRS-classed fleet and publish an annual report on the PSC performance of the fleet. During vessel attendance, our surveyors verify the concentrated inspection campaign checklists issued by different PSC regimes to ensure readiness. To further enhance our digital and AI-driven capabilities, IRS is collaborating with Dassault Systèmes, France, to develop the necessary digital tools.

6) What is your strategic roadmap from 2026 and onwards to increase your market share in Greece? Beyond simple price competition, are you planning to expand your technical decision-making authority locally in Greece to allow for faster, 'Piraeus-centric' solutions for your clients?

- IRS already has a full-fledged office in Piraeus, employing Greek surveyors. Several Greek-flagged vessels are already classed with IRS. We have successfully completed the Greek Flag audit of our Piraeus office and are expecting authorisation as a Recognized Organization (RO) soon. We have ambitious plans to expand our presence in Greece and to class both existing and newbuilding vessels.

We remain committed to supporting Greek shipowners and providing our full spectrum of technical services, backed by a strong local presence.