CIMAC's Executive Decision

New president, executive board amid postponement of IMO Tier 3 regulations



Christoph Teetz, vice president of Research & Technology at MTU Friedrichshafen, has been named CIMAC president. He will serve in that capacity until 2016.

Another term for the executive board for CIMAC (International Council on Combustion Engines) has passed, culminating with the appointment of a new president and new board members at the 2013 CIMAC Congress held in Shanghai. Dr. Christoph Teetz, vice president, Research & Technology at MTU Friedrichshafen, has been appointed as president for the next three-year term.

CIMAC is a worldwide nonprofit association consisting of national member associations, national member groups and corporate members from 26 countries throughout North and South America, Asia and Europe.

The organization brings together manufacturers of diesel and gas engines and gas turbines; users such as shipowners, utilities and rail operators; and also suppliers, oil companies, classification societies and scientists.

At the helm of CIMAC, Teetz will be

responsible for the 28th CIMAC Congress in Helsinki, Finland, in 2016.

According to Teetz, the path to the next congress will remain focused on constantly changing boundary conditions: for example, the tightening of emissions regulations, especially in the maritime industry with IMO Tier 3 and EPA Tier 4 in the U.S. Both will need specific technical aftertreatment solutions or a different approach such as an increase in the use of LNG as an alternative fossil fuel.

Huge resources of shale gas and an expected dramatic increase in fuel demand will likely lead to the use of more natural gas. An extensive use of LNG, already growing especially in IMO ECAs, will need infrastructure and dedicated safety measures aboard ships or other mobile machinery using it as a fuel: a new set of rules for the classification societies will be needed, too. Teetz, however, said that these developments are driven by

customer need and, if the demand is consistent enough, any obstacles can and will be overcome.

Recently, CIMAC members faced the abrupt stalling in the introduction of IMO Tier 3 regulations. The association has already issued a release in which it declared its concern about the IMO's Marine Environment Protection Committee's decision (MEPC 65) to propose a five-year postponement (from 2016 to 2021) in the implementation of stricter limits on emissions of nitrogen oxides for ships operating in NO_x Emission Control Areas (NECAs).

CIMAC claimed that, if the proposed delay is adopted at MEPC 66, it would lead to stranded investments, jeopardize jobs in the shipbuilding industry, and weaken the reputation of the IMO.

As CIMAC stated in the release, the unexpected decision was made despite the fact that a thorough 18-month investigation by an IMO experts group concluded that the technologies needed to comply with the Tier 3 $\rm NO_x$ values are available. The potential delay stems from a Russian proposal; however, it got negative votes from the U.S., Canada and some EU member states. The decision still needs to be adopted at the next session of the Marine Environment Protection Committee (MEPC 66) to be held in April 2014.

According to CIMAC, the international shipbuilding industry depends on adequate, absolutely certain lead times prior to the implementation of new environmental standards in order to appropriately adapt its business strategies, related design and production processes. A deferral like this, just two years before its entry into force, has severe consequences for vessels currently being planned or on order for construction after 2016.

The newly elected board will be represented at the CIMAC Congress in Helsinki in 2016. Besides President Christoph Teetz, other members include: Yasuhiro Itoh, former president; Derek Walford, vice president - Users; Christian Poensgen, vice president - Working Groups; Marko Dekena and Paolo Tonon, vice presidents - Technical Program; Axel Kettmann, vice president - Communication; Robert Ollus, CIMAC Congress 2016 president; and Peter Müller-Baum, secretary general.

Significant investments by manufacturers and customers are threatened, particularly for those companies that are leaders in pioneering environmentally friendly Tier 3 technologies.

It must also be taken into consideration that a possible independent decision by the U.S. regarding its national NECA could result in an undesirable legislative patchwork.

CIMAC said that even if the decision was withdrawn at MEPC 66, the result is still a year of great uncertainty and the potential undermining of the dependability of IMO legislation, in principle. Therefore, CIMAC is requesting that IMO members implement Tier 3 as planned all along, i.e., with effect from January 2016.

"It is damaging for the whole maritime industry to have such an unexpected and abrupt change," Teetz said. "With engines, it can take three to four years for a manufacturer to develop a new technology, and then approximately the same time to put new products into series production.

"So, all the research and development investments are wasted, with obvious repercussions on the industry as a whole. This can create an unfair advantage for those companies that have yet to invest in R & D."

The challenges and concerns of changing boundary conditions across all industries have forced CIMAC to adapt its internal structure to face new scenarios. Teetz said that the association's working groups have changed during the year. There are some new additions while some groups have stopped their activities altogether.

The currently active CIMAC working groups are: Classification Societies, Crankshaft Rules, Exhaust Emissions

Control, Fuels, Marine Lubricants, Users, Electronic and Software Systems, and the newly added Gas Engines.

In the last few years, CIMAC has put a strong emphasis on the group dedicated to Users, which is currently headed by Jörg Erdtmann, head of the Engine Operation Department and the Engine Part of Newbuilding Department at Germany-based NSB Niederelbe Schiffahrtsgesellschaft mbH & Co. KG.

"It is very important for users, as customers, to be part of the processes within CIMAC," Teetz said. "Our association is constantly looking for more expertise to add to the working groups. This is especially true for users' specific experience and needs."

Leading to the 2016 Congress, the next appointment will be the CIMAC Circle at Marintec 2013 in Shanghai, which will be dedicated to future integrated marine systems.

"By analyzing the whole drive system, in any application, you have a much greater chance of improving the total efficiency," Teetz said. "There are already several solutions on the table, such as electrically driven thrusters. Powertrain electrification is a hot topic today and not only for marine applications."

Looking toward the next CIMAC Congress, Teetz said that in reducing CO₂ emissions in combustion engine applications, the total system becomes more important than the engine alone. "We have to explore new solutions — this includes the optimization of freight transport — by looking for the most efficient way to transport specific goods from point A to point B," Teetz said. "Lower fuel consumption is our main aim for the future, and this goes hand in hand with CO₂ emissions reduction."

