

Australia is the world's fourth-largest wheat exporter, second-largest beef exporter and third-largest cotton and sugar shipper. New South Wales is a top grain and cotton producer.

"The real issue that Australia has to deal with is that State governments are more focused on the mining



industry than agriculture," said Mick Keogh, executive director of the Australian Farm Institute.

"That's a short-term gain instead of solving the issue of food security which is necessary for the long term," he added.

Australia's agricultural capacity is also attracting investment from countries such as China and Qatar, keen to tie up supplies in the interest of food security.

But farmers are concerned that some of Australia's most productive grain growing areas, including the north-west of New South Wales, are being swallowed up by companies wanting to access billions of tonnes of coal that lies below farmland.

Their major concern is that mining may adversely impact the quality of water aquifers.

The development of the coal seam gas industry where water, sand and chemicals are injected into wells under high pressure to release gas, is also a concern as farmers believe it will also hurt water quality.

"There is a real dearth of knowledge about our aquifers and the impact of mining -- there is a long way to go in getting the balance right," said Keogh. ■

OMC GETS AMSA'S NOD

The Australian Maritime Safety Authority (AMSA) has accepted a web-based realtime Under Keel Clearance Management (UKCM) system developed under contract by OMC International for the waters of Torres Strait.

The company's founder and executive director, Dr O'Brien said that AMSA will be the first client to operate OMC's latest webbased product DUKC Series 5, which is expected to become mandatory for pilot usage in Torres Strait from about July 2012. After that time, all deep draught ships will transit Torres Strait under DUKC advice.

AMSA's formal acceptance of the customised UKCM system for Torres Strait allows OMC to begin operating the system and follows the successful development and validation stage, started after the contract was awarded to OMC in late May 2010. This validation included full scale measurements of 12 vessels and external independent validation. A group of pilots has been using this system since late last year and Dr O'Brien said pilot feedback has been very positive and helpful in finalising the user interface.

AMSA issued a 'Notice of Production Acceptance' after Dr O'Brien and senior OMC engineers delivered their final presentation to AMSA in Canberra last week.

AMSA's UKCM system should be fully operational in Torres Strait from late August once new charts for Torres Strait, prepared by the Australian Hydrographic Service (AHS), are published. The AHS is finalising completely new and updated charts for general use by mariners, including thorough rechecks of all depths used in the UKCM system.

"This is a very exciting time for our company," Dr O'Brien said. "AMSA's decision to install our Next Generation web-based DUKC product suite in the shallow and ecologically sensitive waters of Torres Strait to enhance shipping safety and efficiency further endorses our DUKC technology as an essential risk mitigation tool. This will also showcase our move to web-based technology, which is the way of the future.

"This is the first time that a UKCM system will be

operational in a complex coastal environment in Australia. Following AMSA's direction to start the production stage, we expect government authorities from other waterways, such as Malacca/Singapore Straits, to be closely monitoring developments. It is getting increasingly harder for authorities to ignore the proven safety and economic benefits of our DUKC technology which is already operating worldwide. OMC now has a great DUKC Series 5 platform to move forward with.

"It is great news that OMC and AMSA are working together to progress this UKCM system because we both share the same 'Safety First' vision. UKCM is OMC's core business so safety is everything. I particularly want to acknowledge the contribution made by key AMSA staff, working closely with our team of software developers and engineers, to produce an outstanding result.

"Interestingly, thanks to our technology, AMSA also now has a display system for the vast amount of environmental data which it collects in real-time through the Strait. We have provided this display as part of the UKCM outputs and it has benefits in unexpected places, such as for masters of pilot launches. This means AMSA can confidently provide the information to operators to make decisions on limiting conditions for pilot transfers, which will help to ensure that pilots are only transferred when it is safe to do so."

DUKC Series 5, which can be customised for each port or waterway, gives authorised users easier access to this system. They can now execute UKC related tasks via the web as well as the traditional desktop-based user interface. The new module format also enables users to access only the self-contained modules relevant to their specific needs, whether it be long-term voyage planning, real-time onboard pilotage applications, or shore-based monitoring of numerous vessels in real-time.

All DUKC products, including the new web-based DUKC Series 5, use the SPMS (Simulation Package for the Motion of Ships), invented by Dr O'Brien.