## Competence assurance and assessment sorely needed

As the number of windfarm support vessels has grown and as their complexity and sophistication have increased so the need has grown to demonstrate to clients that masters and crew have a sufficient level of competency

by Philip Woodcock\*

n a typical November day off the east coast of the UK, two separate incidents took place involving windfarm service vessels (WFSVs) that will have potentially farreaching consequences for the industry.

Winds were gusting up to Beaufort 5 and with moderate visibility it was 'business as usual' for two UK windfarms until one WFSV collided with an unlit foundation and the other with a bombing range target.

As both of the incidents are under investigation by the Marine Accident Investigation Branch in the UK the exact details will remain under wraps until the reports are finished. As one involved a collision with injuries and the other flooding that necessitated the evacuation of the vessel, it is reasonable to think that operating practices and crew competence will come under scrutiny.

If competence does come under scrutiny, the focus may be placed on the certification of WFSV skippers which, in the UK, generally follows the Royal Yachting Association (RYA), commercially endorsed Yachtmaster scheme, rather than the internationally recognised certificates issued under the International Maritime Organization's (IMO) Standards of Certification, Training and Watchkeeping (STCW) convention. However, looking at certification alone may be a red herring if competence is not taken into account.

Competence is a challenging topic to quantify and judge in the operation of WFSVs. It is not a function or output of the existing certification process. In the UK efforts have been made by some clients to raise quality levels though specifying that only STCW II/2 certified masters will be accepted.

This practice follows the domestic regulatory requirements in countries such as Germany and Denmark. To comply with this, the most practical solution is the Master (Code vessel



by upgrading the Yachtmaster through an oral examination with a Maritime and Coastguard Agency (MCA) examiner of masters and mates.

In the UK, without any clear guidelines on competence, this standard does not ensure an increase in quality *or* safety. On the contrary, it precludes many experienced, competent WFSV skippers while encouraging operators to employ certificated masters who do not possess the experience or understanding of the safe operations of a WFSV.

The supply of WFSVs has changed fundamentally from local angling boats pressed into service on the Blyth and North Hoyle windfarms in the UK or Horns Rev in Denmark 10 years ago to the purpose-built, classed vessels seen today on London Array, Riffgat and Dan Tysk.

The new boats are larger, faster and have much more technology built into them. The fleet has ballooned, with the 4C Offshore database listing 375 boats available or under construction. Unfortunately, the boom has seen operators who have little or no experience in operating ships, let alone windfarm vessels, getting into the business. What they do have is money, some provided by hedge funds, with which to buy the boats and the knowledge they need.

This lack of in-house knowledge has resulted in a rush to 'buy' competence from other

industry. The risk of this is a 'knowledge drain' in existing fleets and a general watering down of knowledge and expertise in the wider fleet.

Client expectations have evolved and grown exponentially as well. Only a few years ago a skipper could tell his owner that the new boat computer could remain in the boot of the car as "it will not be needed on this windfarm", but this stance would not be accepted today. Contracts are appearing which contain liquidated damage clauses if the daily progress report is not emailed to the client within a defined timeframe after the day's work. This, coupled with detailed near miss, breakdown and damage reporting requirements ensures that a skipper's day is not over when he has shut down the engines in port.

Operators are developing their management systems to meet the health and safety requirements of clients and regulators as well as meeting the practicalities of operating vessels many hundreds of kilometres from their headquarters. All of these administrative burdens are making the definition of a good skipper evolve from just being able to drive and maintain the boat to one who can manage the total vessel operation. In short, workboat skippers are becoming windfarm service vessel masters, and this requires additional skills outside those examined under yachtmaster

or learned traditionally as a deckhand on a lifeboat or fishing boat. These are competencies that the operators must take responsibility for understanding, training and implementing.

What, then, are the competencies needed to operate a WFSV safely and how should these be assessed? In an industry that is evolving as rapidly as offshore wind and with so many stakeholders who all have slightly differing views on safety regulation, this is a difficult discussion.

From a vessel operator's perspective, competence can be viewed as relating to the roles employed onboard, with the master needing to know all of the competencies of a deck hand but not vice versa. There are safety-specific roles such as vessel induction, project emergency procedures and vessel emergency procedures that are critical to the operations and thus need to be performed at a high standard.

The traditional roles of the skipper, such as ship handling, maintenance, vessel husbandry and performing safe transfers, are key areas. Vessel navigation is also paramount, to ensure that skippers have the skills to operate the radars and electronic chart plotters fitted today and to understand the electronic chart display and information systems (ecdis) of tomorrow, so that safe passages can be made at speed in any state of visibility.

However, not only will navigation competence need to deal with the electronic bridge, but also understanding and compliance with the collision regulations (COLREGS), passage planning and the correction of nautical publications. Whereas vessel management is a new role that covers company requirements such as compliance with the safety management system, undergoing class surveys and audits or running a vessel abroad are areas where more training and guidance will be needed to ensure competence. One should also consider some competencies, such as vessel handling and safety, as 'core' or essential to

doing the job, and the person assessed can only be considered competent or not. Other competencies could be considered as 'noncore' and allow for a 'requires improvement' assessment, which states that they are safe to do their job, but need improvement in some non-essential areas such as vessel management, crane operations or administration.

A company may develop a system of competencies, but will need to find a method of assessing the identified competencies and providing mentoring to raise standards in areas that have been identified as below requirement. This may be done through use of a company assessor or a network of training masters who have been deemed competent to assess others.

A company also needs to decide whether it wants to assess all existing crew or just those who are newly hired. By assessing all crew one is able to determine the baseline of competence within the fleet and find out what steps need to be taken to reach the desired level. However, doing so will probably meet with resistance from more 'traditional' employees who do not understand that there is a need for openly assessing competence. Sensitivity and discussion are needed here to ensure that messages about competence and fleet safety are delivered in a non-threatening fashion.

The International Marine Contractors Association (IMCA) recognised many years ago that being certified was only the first stage in being ready to perform a job offshore. It developed guidance on competence and assessment which in its words was "... giving the offshore industry in general confidence that all personnel appointed to safety-critical and other relevant positions can carry out their job in an effective manner."

Over the years this guidance has evolved to cover marine, diving and remotely operated

vehicle/survey functions. Separately, the National Workboat Association (NWA), the representative of the UK workboat operators, started to develop best practice guidelines for WFSV operators in 2012. These guidelines also cover minimum crew competence and proposed a competence verification scheme. This scheme would have allowed a NWA certificate to be issued in addition to any national certificate of competence the skipper may hold. The NWA and IMCA are now co-operating on this subject, with the NWA being asked to propose the competence guidelines for skippers and deckhands of WFSVs for inclusion in IMCA's Guidance on Competence Assurances and Assessment document C002.

The NWA is able to draw on the knowledge of some of the longest established WFSV operators who have competence schemes in service within their own organisations. This access to the lessons learned will ensure that a practical, effective scheme can be developed and administered.

Standardisation through a competence verification scheme will also give operators the confidence that newly employed crew have been assessed to levels similar to those within their own organisation.

This co-operation will ensure that clients will have a practical method of verifying that they are employing a quality vessel operator with crews that meet a minimum, acceptable level of competence. Furthermore, it will demonstrate to the regulators that the WFSV industry takes safety seriously and that it has the tools to ensure that WFSV crews are competent in the roles that they perform. **OWJ** 

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