

Measure	Pros	Cons	Additional Issues
Increase MLS	<p>Simple technical measure</p> <p>Will initially reduce landings as 13-19% landed between 140-150</p> <p>Increase yield of crab</p> <p>Ensures better market quality of the catch</p> <p>Allow to breed for longer before exposure to fishery</p> <p>Increased egg production by larger sizes</p> <p>zero fishing mortality between 140 and 150?</p> <p>Bigger crab which may be useful for some markets</p>	<p>Reduced landings for fishermen</p> <p>Short-term economic impact on fishers as landings will reduce initially</p> <p>A permanent management measure</p> <p>Does not apply to vessels from other jurisdiction except to NI 0-6nm</p> <p>French have access Carnsore to Cork <12nm so would have to consult.</p> <p>Some markets prefer smaller especially if pieces per box such as China</p> <p>If you don't know where the boats are you cannot implement this measure an area basis e.g. inside 6nm or inside 12nm</p>	<p>Support on measuring – gauges etc</p> <p>Might have to be a regional measure, will all regions agree?</p> <p>Requires SI (public consultation). Should not be same as lobster max LS as it discriminates against Irish vessels</p> <p>Review if stock starts to respond to measure.</p> <p>Optimal size needs to be considered and need data to support this</p>
Ban on Berried Crab	<p>Easy and simple to introduce and enforce</p> <p>Small increase to recruitment</p> <p>Good for recruitment –chance to reproduce</p>	<p>Won't have a huge impact but it's a positive action</p> <p>Very short term impact on landing and earnings</p> <p>East coast end of Oct Nov December</p>	<p>Definition = any trace of eggs on clutch</p> <p>Applies to all fishermen who land crab as targeted or by catch</p> <p>Unless current legislation is enforced on clawing then there will no impact from this measure</p>

You can recatch the crab when it eggs hatch therefore no loss to income in long term but all the benefits
 Immediate live return so simple to implement

Good communication to buyers and processors as well as the fishing industry.

Restrict clawing

Background work is already done on this – there is a proposal already development on amending the regulation. It could be rolled out quickly.
 Protects undersize crab, soft and berried crab

Controlling clawing under current legislation is hard to enforce.

Huge demand for white crab meat.

Parts of industry remote from processors ALREADY FISH FOR CLAW MARKET which will not change as they cannot get rid OF 30 boxes of crab.

Restrict Landing of Soft Crab

Stop landings of soft crab

Alternative bait will be needed for other fisheries such as whelk

Impact on loss of bait for other fisheries

Market doesn't want it

Significant economic impact when there is a high abundance of soft-shelled crabs during certain periods

Is this as big an issue as we might think

In a few weeks it will be marketable once it hardens with higher value

Difficult to define/identify soft crab

Is there regional variation?

Significantly reduce landings

Could be difficult to enforce

Quality of live return being protected
 Need definition

Ban on landings soft crab would improve the fishery reputation

No value as whelk bait

Improves fishery yield as reduced amounts of crab landed at a lower value price
 Maintain crab quality and value

Introduce Escape Gaps

Makes fishing operations easier for vessels in the NW for example
 Would allow small lobster/crab escape. Reduces bycatch of undersized crabs
 30% effective for small sized Brown crab release. Also effective for undersized lobster
 More effective live return
 Less claw loss
 Less work on deck
 Relatively low cost measure

Increased cost and work to adapt pots
 Need to consider velvet crabs – may be fishery specific
 Difficult to enforce?
 Have to bring all the pots in to install
 Not completely effective for crab 30-40%
 Need participation by everyone for it to be effective

How will this work with pot limits if they are introduced?
 Need to careful consider the type of escape panel SO THAT IS OPTIMAL FOR THE FISHERY
 Potential to have them made in Ireland from recycled plastic
 Would need careful legislation and enforcement
 Potentially would be most suitable for new gear – introduce on phased basis

Staggered seasonal Fishing Cessation

Rotating seasonal closures may improve market supply and price
 If seasonal closures during low effort seasons will they be effective

Is there any benefit if vessels aren't fishing anyway due to weather?
 Enforcement would be difficult

Do these need to be regional? There needs to be staggered regional closures to maintain the market
 Combine with other area based measures

Gives an opportunity for processors to reduce any frozen stock in storage	May need agreement from different countries – could be challenging	The closure would need to be a complete closed, no other activity would have to happen – does this include all fishing including bycatch of crab from lobster fishermen.
Definite defined effort reduction and reduced fishing mortality Can be done in such a way to maintain access to market	Economic impact on fishers need to be addressed If done incorrectly could lose access market and impact fleet and processors in value chain	Should only be used judiciously Needs diversification or support from the state to make it successful
Useful in conjunction with other management measures to achieve specific goals	Would need to be used in combination with other management measures Needs to be done when it has impact which will have a significant economic impact	Would need to be evaluated and monitored

Manage number of vessels in the fishery - Managed Access

More product for the vessels that are fishing the stock	Latent capacity holders without track record will consider that their capacity /asset value has been devalued	Need historical records of fishing (track record) to access permits (at least three year) – what is the entry limit in terms of amount landed (e.g., 2 Tonne)
Controls over capacity	There will be a race to get crab fishing to establish a track record especially if phased in	Entry and exit rules really important - new entrants should only be allowed in if the stock status can accommodate them
Long-term security for those already fishing	Risk of ringfencing which is not welcomes among some parts of the industry	Permit numbers would need to be addressed at regular intervals in line with stock status

Responsible, invested fishing practices

Quantifies the amount of boats that are fishing crab

Managing the access is a conservation measure in that it can be used to reduce the amount of effort on crab in conjunction with other measures

Manages the latent effort issue

Needs robust entry/exit rules

Needs to have very tight rules and regulations

You don't want latent permits

Needs to be tied in with pot limits which may increase control enforcement effort
May be a legal challenge

Need a retirement scheme for exit and allowing entry (new entrants will need specific requirements like experience on crab)

Can't become an ITQ! Can't be transferable.

Need a use it or lose it clause

Must make provisions for young people coming in the future.

EU can introduce a quota if the crab stock on a European basis is in trouble.

Consider decommissioning scheme for latent capacity holders who are not able to prove track record.

Effort Control

Effort control and reduced effort

Prevents overfishing by limiting the time or resources fishermen can use.

Protects stocks from excessive pressure, contributing to long-term sustainability.

There are already effort regimes in place on kW days

Can be perceived as overly restrictive and a threat to livelihoods. Requires detailed monitoring to be effective and fair.

We don't know the amount of effort to control

Used in combination with other measures

Need to consider the sequencing of effort control. This is key, needs to be linked to caps on vessels, permits, etc. These permit vessels (by area) can then decide the effort limitations.

How does this work along with all other possible measures with Lobster fishing.

Responds to falling stocks to increase biomass and protect recruitment

Capping the fishery so effort cannot increase

Equality of application

How do you divide it at the start to have economic stability?

Needs managed access to work best

Learn from any mistakes made from the past.

This measure also ties in to pot limits, area management measures, managed access.

Need to Know where to start? What the stock level and what reduction is required to get to F, MSY or other suitable indicator ?

Malin stock needs 25% reduction in fishing mortality to return to MSY

Pot Limits

Needs managed access to work effectively

Reduces effort, gear and operating costs (fuel, bait), carbon footprint

Fairness across the industry

CPUE should increase

Pots would be looked after more! prove profitability

Beneficial to entrants in terms of physical labour.

It may encourage vessels to buy more pots to reach the limit if flagged in advance

Limit profitability for vessels

Difficult to enforce and monitor

There would be 1000s of euros of pots not fishing – need to address the capital tied up in this –pot decommissioning as capital investment on pots will be lost

You would need to tag all pots
It could be ever reducing if not used in conjunction with other measures

There will need to consider if there is a pot limit per vessel size (may be a division at <>12m).

Will need VMS on board to monitor fishing and effort.

Unworkable without a pot decommissioning scheme?

Could be linked to managed access and pot tags could be issued.

Data required.

Must not discriminate against Irish vessels and should be area specific

Would need to be off shore and inshore pot limits

It would have to be a phased process to replace and tag all pots

Pot Type Restrictions	<p>Reduces pots numbers</p> <p>There is less soak time</p>	<p>Will be difficult to enforce</p> <p>There is less soak time (more work to collect pots)</p> <p>May reduce catch efficiency if certain types of pots are restricted.</p>	<p>Restrict which pot types?</p>
Introduce TAC	<p>Limits the total amount of crabs that can be caught, preventing overfishing and allowing for better control of fishing pressure.</p> <p>Fishermen can decide how they want to use their effort to reach their catch</p> <p>Encourages sustainable management, aligning with stock assessments and scientific recommendations.</p> <p>Can be adjusted annually based on stock health, allowing for flexible management.</p> <p>Reduces fishing mortality</p> <p>Encourages high quality/high grading</p> <p>Can increase price</p>	<p>No appetite in the industry for TACs</p> <p>Data may not be there to effectively allocate TACs.</p> <p>Subject to ministerial policy</p> <p>Difficult to manage as allocation between vessels will be difficult</p> <p>Viability of vessels if there isn't enough TAC</p> <p>TAC can reduce</p> <p>Market sustainability</p>	<p>The new control regulation may allow for a discussion on TAC in the future when data is available.</p> <p>Cockle fishery has TAC and it is working.</p> <p>Vessel allocations could be considered. This is different to TAC because an allocation dictates how the crab will be distributed between vessels</p> <p>No ITQs as policy, however ringfenced fisheries existed Tier 1 Tier 2 Scallops</p> <p>Capping the fleet has negative connotations so should be referred to as managed access.</p> <p>Decommissioning latent capacity could be considered as a measure to manage latent capacity</p>

Requires managed access to work effectively

Area Based Measures

There could be national measures (such as berried crab, MLS).

Tailored management for specific regions can increase effectiveness.

Allows local populations to recover or be protected.

Allows any measures to applied in an appropriate and practical way

Encourages fishers taking ownership of the management measures and could mean higher level of compliance because of better buy in

Can allow areas to go further in their ambition because it is practical - no trans boundary issues in certain cases

Reduces cost

Could be difficult to enforce

Potential displacement of effort to other areas.

Administrative complexity in enforcing varying measures across different zones.

Displacement of activity might become an issue particularly if the measures are not popular

Defining the areas could be challenging

Needs iVMS to be effective

If closures would need to have a certain amount of flexibility to accommodate for weather issues

Closure has negative connotation.

If fishery entry regimes are in place how is this controlled along with area-based management or closures. Can a vessel move between areas?

Linked to seasonal closures – how would these work together?