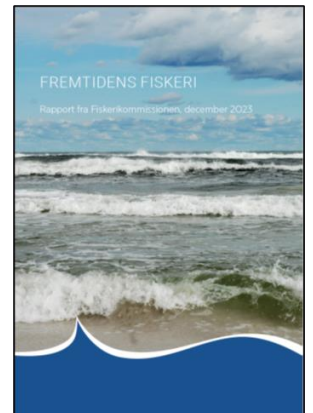
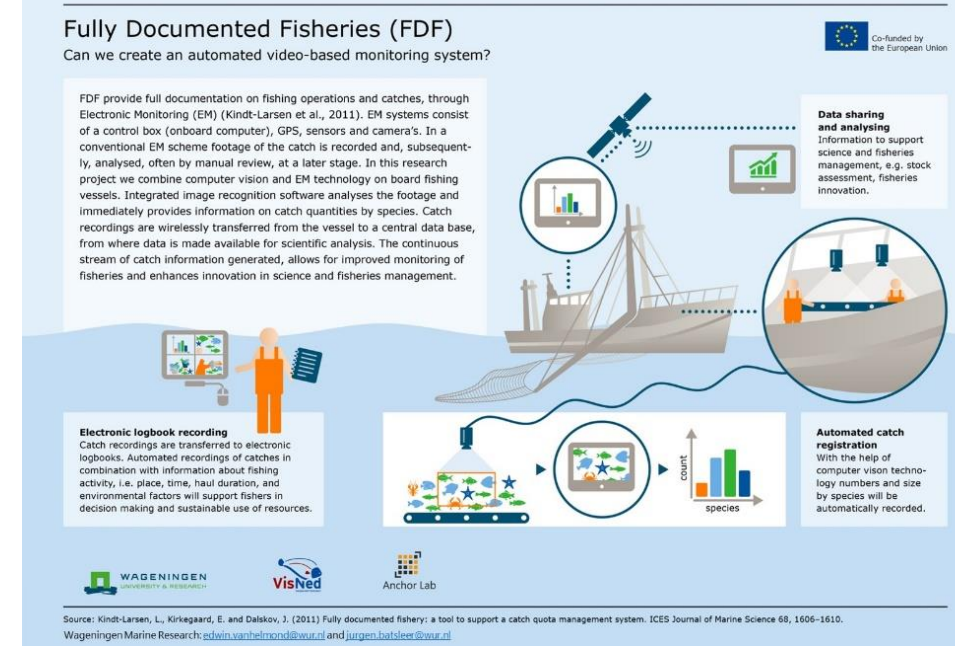


Emerging e-governance in EU fisheries: **Fully documented fisheries (FDF) through electronic monitoring (EM)**

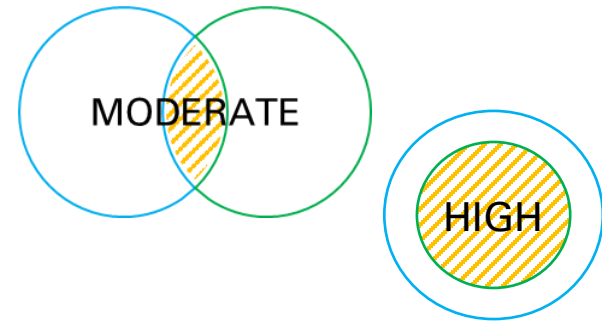
“Electronic monitoring of catch in real-time on the vessels, accompanied by GPS registration of the vessel’s or the gears’ position during fisheries activities”
(Report of the Danish Fisheries Commission, own translation)

- Made possible by a suite of increasingly mature technologies (GPS, cameras, sensors, image recognition software, AI), enabling fuller oversight of fishing activities and catches.
- Increasingly looked upon as a central part of future fisheries management and governance.
- Pushed primarily top-down but also bottom-up initiatives.

But what could/should this technological e-governance development mean for governance under the CFP?



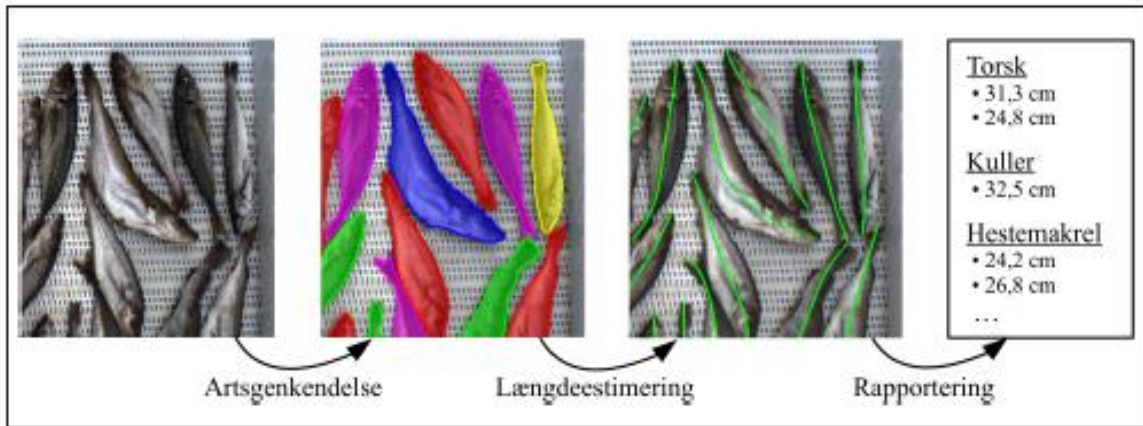
'Business-as-usual' (BAU) governance: ***FDF facilitates current top-down, command-control model***



In the short term, FDF improves/'lubricates' BAU management & governance:

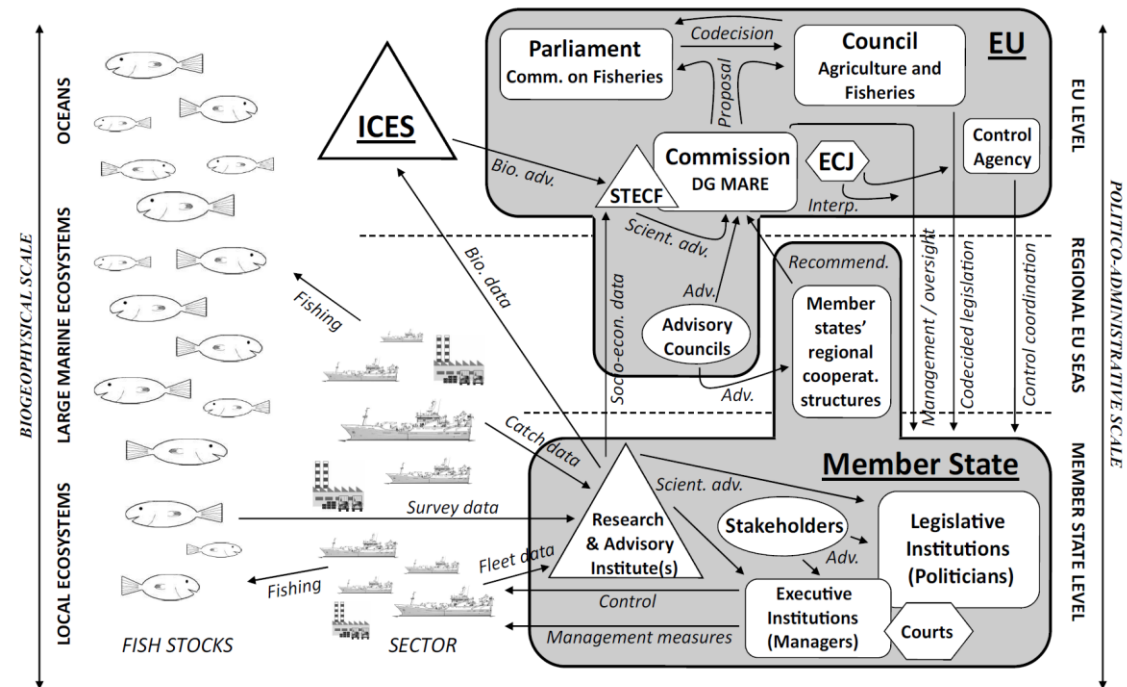
- Improving data for science
- Automating control, reduce need for physical control
- Making fishers' life easier (e.g. admin + bycatch)

"Keep calm – it's going to be business as usual!"



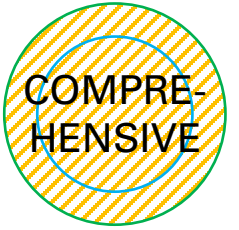
(Bengtson, Pedersen & Madsen, 2024)

BUT FDF will likely not remove the inherent tensions in the CFP - AND it will (?) be a step on a path...



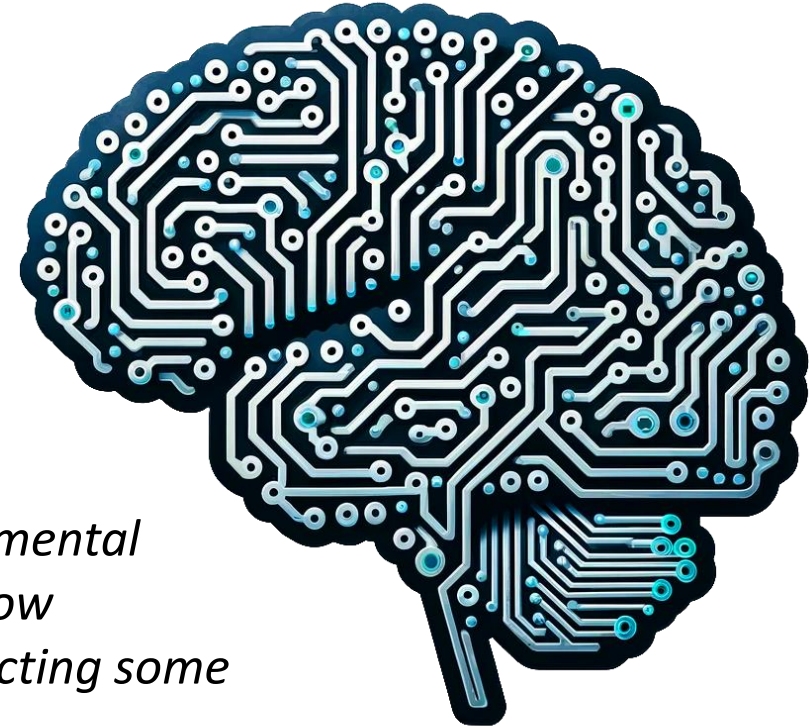
Business-as-usual 'on speed':

New technology, big data and AI-capabilities accentuates BAU



Technology innovation moves the system of decision-making towards 'near-perfect-knowledge', giving way for AI-supported 'optimal and neutral' decisions:

- *...on individual vessel quotas, fishable areas, gear choice, landing sites, etc. – all adjusted in real-time by AI...*
- *...informed by real-time data on catches, CPUE, market considerations, bycatch of under MLS and PETS, weather forecast, etc. ...*
- *...within given parameters for outcome of decisions, such as low environmental impact, consideration of SSF, peripheral communities, market demand, low emissions, safety at sea, maximising protein outtake from the sea, respecting some measure of relative stability, etc. ...*



...This kind of feels like more – and more detailed – rules and 'top-down, command-control', doesn't it? So what could we imagine instead...? Maybe we have to go a bit back in time to ideas that were hot 10-15 years ago? The 2009 Green Paper...

"One AI to rule them all..."

Results based management with reversed 'burden of proof': *FDF makes a shift from 'top-down, command-control' to 'self-documentation and audit' more feasible than ever before?*

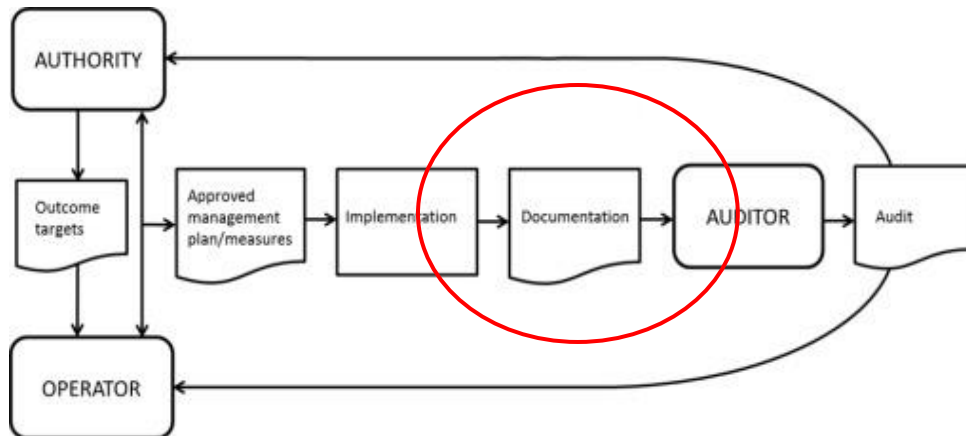


Key elements of the model:

- “1) That authorities define measurable objectives for the utilization of fisheries resources;
- 2) That resource users are made responsible for achieving these objectives and for
- 3) Providing documentation that allows for an audit of the extent to which they are met.”

- The results
- Choosing own path (AI?)
- Self-documentation (FDF)

(Nolde Nielsen, Holm and Aschan, 2015)



(Nolde Nielsen, Holm and Aschan, 2015)

Conditions:

- * Well-organised industry and active stakeholders
- * Political and legal system ready and able to delegate
- * Commitment to and feasibility of reversed burden of proof
- * Checks and balances / strong audit and credible sanctions
- * Secure user rights (for industry buy-in)

This is – by the way – also the long-term vision of the Danish Fisheries Commission for (the majority) of Danish fisheries, as well as for the CFP in relevant regional seas...