Aglia, what is it?
What is Aglia?

Association
Created 1988
On the french atlantic coast and west chennal
3 Regional council
3 professionnal fishing committees
5 professionnel shellfishing committees

➔ Support the development of fishing and shellfishing sector

➔ identifying needs of members

➔ develop projects to provide or test solutions

➔ Share informations together
What are consequences of landing obligation?

>> selectivity and survival assessment
How can find solutions about landing obligation

- Aglia managed 2 projects:
  - Improve selectivity
  - Survival assessment and improve fishing practices
The selectivity projects
OPTISEL & REDRESSE

• Objectives: reduce discards in the bay of Biscay (selectivity, technologies, fishing strategies)

✓ Working group with fishermen to define solutions
✓ Test the solutions at the sea
✓ Assess the socio-economic impact

~20 devices tested for different fishing gears
1- Working groups

The goal of this WP:
- understand what is the problems of selectivity have the fishermen
- show, with scientifics, what are the solutions could be tested
- select which solutions that’s fishermen want to test
What is the goal of the tests
- compare the efficiency between standard trawl and selective trawl
- collected data to analysis the tests
- confirm the effective working of the solutions
2- Tests at the sea

These are sometimes inconclusive tests...
Pelagic trawler

- Test of 2 bluefin tuna barriers (400mm et 800mm)
Bottom trawler

- Dispersive ball
Danish seine

- Red mullet: test cylinder in T90
  - No effect on selectivity

- Mackerel and whiting: PMC 100mm
  - Business loss too important
• Splitter net
Les tests en mer

...And other promising solutions!
Pelagic trawlers

- Test of multibeam sounder
- Good efficiency on the anchovy
Nephrops trawler

- Gorget in square mesh 90mm
- No commercial loss on nephrops
- Important decrease of hake discard
Test at the sea

• Nephrops gate
Test at the sea

And good results !!!
# What we have to memorize

<table>
<thead>
<tr>
<th>Solutions are adapted to a situation (depend on the boat, the captain, target species...)</th>
<th>There are no miracle solutions!</th>
</tr>
</thead>
<tbody>
<tr>
<td>The devices are evaluated according to the commercial losses, the reduction of discard, ease of implementation</td>
<td>This kind of project is very expensive</td>
</tr>
</tbody>
</table>

https://pecheselective.aglia.fr/
And now ?...
Survival assessment of nephrops
Improve the sorted of nephrops

- Set up slide on board for nephrops trawler
- Improve the survival during the sorted (10mn on the deck against 60mn)
- The fishermen made it compulsory since 2017
Survival assessment

• Experiment on land according to 2 scenarios: standard vs. slide
  • Standard scénario : survival = 39%
  • Slide scénario : survival = 52%

• The involvement of professionals has allowed us to have a renewed exemption since 2017
# The benefits of the project

<table>
<thead>
<tr>
<th>Environmental effects</th>
<th>Economics effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>The undersize nephrops can return in the sea</td>
<td>Preserve the economic model of nephrops trawlers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social effects</th>
<th>Scientifics effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preserve the working conditions on board</td>
<td>Improve the knowledges of the nephrops</td>
</tr>
</tbody>
</table>
Assess the economic and social impact of TAC on the fleet - SCOPE project
## what is the context

<table>
<thead>
<tr>
<th>The TAC negotiation</th>
<th>Long term management plan for the occidental sea</th>
<th>Consider economic and social impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>the social and economic impact are not considered (or limited)</td>
<td>Have elements to negotiate the fishing opportunities</td>
<td>Give economics and socials arguments to select the best option for the fishing sector and halieutics ressources</td>
</tr>
</tbody>
</table>

>> Develop an informatic tool to improve our knowledges about the TAC
The different modules of this tool

<table>
<thead>
<tr>
<th>A monitoring center to understand what’s happen the last years (example: 2012 VS 2015)</th>
<th>Set the <strong>biologic red lines</strong> in terms of necessary TAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simulate the <strong>economics impacts</strong> of biologics scenarios in terms of potential TAC</td>
<td>Simulate the impact of management alternatives to help decide on the most appropriate fisheries management measures</td>
</tr>
</tbody>
</table>
How does it work

Marges de manœuvres ECO et BIO
Charges variables d'exp* + Charges fixes totales
Charges fixes d'exp* + ivst
Charges fixes d'exp*
Coût d'ivst et de financement
Seuil de rentabilité Min
RO Min
Contraintes ECO
sensibilité
Permet de couvrir l'ensemble des coûts
Ressource exploitable permettant d'atteindre le CA minimum
Réserve halieutiques
How does it work

**Constaté (S. Réf. 2012)**

<table>
<thead>
<tr>
<th>Nbre chapitres consacrés</th>
<th>BAR</th>
<th>BÂTIMENTS</th>
<th>CARABINE</th>
<th>LANGoustines</th>
<th>LÉBÂTIMENT</th>
<th>NUITS</th>
<th>MEURG</th>
<th>PIÈ</th>
<th>RÂCHET</th>
<th>RÉGISTRE</th>
<th>SOLE</th>
<th>AUTRES ESPÈCES SOUS QUOTA</th>
<th>AUTRES ESPÈCES NON QUOTA</th>
<th>TOTAL</th>
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</thead>
<tbody>
<tr>
<td>autriche chalutier langoustiner</td>
<td>30</td>
<td>838</td>
<td>1416</td>
<td>189</td>
<td>1585</td>
<td>65</td>
<td>176</td>
<td>542</td>
<td>38</td>
<td>215</td>
<td>455</td>
<td>1925</td>
<td>711</td>
<td>6522</td>
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<td>1375</td>
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<td>118</td>
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<td>635</td>
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<td>101</td>
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<td>1347</td>
<td>16817</td>
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<tr>
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<td>1194</td>
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<td>1426</td>
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<tr>
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<td>7</td>
<td>31</td>
<td>34</td>
<td>230</td>
<td>1</td>
<td>298</td>
<td>416</td>
<td>629</td>
<td>315</td>
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<tr>
<td>Chalutier langoustiner spécialisé</td>
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<td>1433</td>
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<td>1249</td>
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<td>9059</td>
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<tr>
<td>Chalutier pélagique</td>
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<td>234</td>
<td>34</td>
<td>723</td>
<td>27</td>
<td>183</td>
<td>996</td>
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<td>10</td>
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<tr>
<td>Fileuse à sole</td>
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<tr>
<td>Seneur danois</td>
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<td>1186</td>
<td>67</td>
<td>3</td>
<td>0</td>
<td>25</td>
<td>311</td>
<td>286</td>
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<td>12</td>
<td>1835</td>
<td>14</td>
<td>553</td>
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<tr>
<td>Total CA (k€)</td>
<td>608</td>
<td>19302</td>
<td>25779</td>
<td>2880</td>
<td>29985</td>
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<td>76244</td>
<td>44342</td>
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<tr>
<td>Prix moyen (€/kg)</td>
<td>608</td>
<td>8,1</td>
<td>5,2</td>
<td>3,8</td>
<td>12,2</td>
<td>6,1</td>
<td>2,1</td>
<td>2,7</td>
<td>2,8</td>
<td>2,8</td>
<td>8,2</td>
<td>12,7</td>
<td>2,4</td>
<td>3,1</td>
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<tr>
<td>Total volume (tonnes)</td>
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<td>2383</td>
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<td>1188</td>
<td>927</td>
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<td>9567</td>
<td>19689</td>
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</tbody>
</table>

**Constraining eco de référence avec réserves**

<table>
<thead>
<tr>
<th>Marges de manœuvre éco avec réserves</th>
<th>Marges de manœuvre économique en %</th>
</tr>
</thead>
<tbody>
<tr>
<td>13361</td>
<td>1317</td>
</tr>
<tr>
<td>25309</td>
<td>1827</td>
</tr>
<tr>
<td>20230</td>
<td>142</td>
</tr>
<tr>
<td>7524</td>
<td>532</td>
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<td>57422</td>
<td>2072</td>
</tr>
<tr>
<td>17859</td>
<td>4420</td>
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<tr>
<td>45170</td>
<td>6616</td>
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<tr>
<td>21828</td>
<td>388</td>
</tr>
<tr>
<td>6188</td>
<td>1128</td>
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</tbody>
</table>

**Conceptual Biologique**

<table>
<thead>
<tr>
<th>Opportunités biologiques</th>
<th>hors quota</th>
<th>6426</th>
<th>1205</th>
<th>4163</th>
<th>859</th>
<th>1447</th>
<th>4386</th>
<th>259</th>
<th>1683</th>
<th>3828</th>
<th>Non connu</th>
<th>hors quota</th>
<th>24257</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marges de manœuvre biologiques en %</td>
<td>hors quota</td>
<td>23%</td>
<td>37%</td>
<td>41%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td>34%</td>
<td>29%</td>
<td>hors quota</td>
<td>9%</td>
<td>hors quota</td>
</tr>
</tbody>
</table>
The tool in development

The monitoring center are developp

It allowed to know the parameters of:

- Approach by fleet segment (economic ratio, production ratio, population,…)
- Approach by species (volume, price,…)

We will also develop the two last modules before the end of 2022.
Thank for your attention

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