



agence d'évaluation de la recherche
et de l'enseignement supérieur

Department for the evaluation of
research units

AERES report on unit:

HALIEUTIQUE MANCHE-MER du NORD

HMMN

Under the supervision of
the following institutions
and research bodies:

Institut Français de Recherche pour l'Exploitation de la
Mer



October 2012



agence d'évaluation de la recherche
et de l'enseignement supérieur

Research Units Department

President of AERES

Didier Houssin

Research Units Department

Department Head

Pierre Glaudes



Grading

Once the visits for the 2012-2013 evaluation campaign had been completed, the chairpersons of the expert committees, who met per disciplinary group, proceeded to attribute a score to the research units in their group (and, when necessary, for these units' in-house teams).

This score (A+, A, B, C) concerned each of the six criteria defined by the AERES.

NN (not-scored) attached to a criteria indicate that this one was not applicable to the particular case of this research unit or this team.

Criterion 1 - C1: Scientific outputs and quality ;

Criterion 2 - C2: Academic reputation and appeal ;

Criterion 3 - C3: Interactions with the social, economic and cultural environment ;

Criterion 4 - C4: Organisation and life of the institution (or of the team) ;

Criterion 5 - C5: Involvement in training through research ;

Criterion 6 - C6: Strategy and five-year plan.

With respect to this score, the research unit concerned by this report received the following grades:

- Grading table of the unit: Halieutique de Manche-Mer du Nord (HMMN)

C1	C2	C3	C4	C5	C6
A	A	A+	A	A	A



Evaluation report

Unit name: Halieutique Manche-Mer du Nord

Unit acronym: HMMN

Label requested:

Present no.:

Name of Director
(2012-2013): Mr André CARPENTIER

Name of Project Leader
(2014-2018): Mr Bruno ERNANDE & Mr Andre CARPENTIER

Expert committee members

Chair: Mr Luc VAN HOOF, IMARES, Agricultural University of Wageningen, Netherlands

Experts: Mr François BONHOMME, CNRS

Mr Guy DUHAMEL, Museum National Histoire Naturelle, Paris

Mr Jean LAROCHE, Université Bretagne Ouest

Mrs Clara ULRICH, National Institute of Aquatic Resources, Denmark

Scientific delegate representing the AERES:

Mrs Paule VASSEUR

Representative(s) of the unit's supervising institutions and bodies:

Mr Benoît BELIAEFF, IFREMER

Mr Jacques BERTRAND, IFREMER

Mr Dominique GODEFROY, IFREMER

Mr Philippe GROS, IFREMER



1 • Introduction

History and geographical location of the unit

The Channel North Sea Fisheries unit (Unité Halieutique Manche Mer du Nord, HMMN) belongs to the Department of Biological Resources and Environment of IFREMER. Together with 4 other Fisheries units, the HMMN unit was created in 2005 following the subdivision according to regional maritime areas of a former national Fisheries Department. The HMMN unit's mission combines public service tasks -the monitoring and the assessment of fisheries resources and French fishing fleets – together with research in fisheries science and, more generally, marine ecology.

The HMMN unit consists of two laboratories located in two different geographical areas: the Fisheries Resources Laboratory of Boulogne-sur-mer (Laboratoire Ressources Halieutiques de Boulogne sur mer, LRHBL, Nord-Pas de Calais) and the Fisheries Ressources Laboratory of Port-en-Bessin (Laboratoire Ressources Halieutiques de Port-en-Bessin, LRHPB, Basse-Normandie). These are part of a network of 11 Fisheries Laboratories/units distributed along the French coastline (including the French Overseas Departments and Territories) on which rely the Fisheries Information System (Système d'Information Halieutique), which is in charge of monitoring fisheries resources and their uses, and the National Fisheries Evaluation Group from IFREMER, which is in charge of fisheries assessment. Regarding public service tasks, the HMMN unit is in charge of a geographical zone extending from the maritime district of Dunkerque to that of Cherbourg in terms of fishing ports, and from the English Channel to the North Sea in terms of fishing areas.

Management team

The management team is composed of the head of the HMMN unit, the heads of the two laboratories and a personal assistant. In addition, a research scientist located at the LRHBL (Mr Bruno ERNANDE) is in charge of scientific coordination.

Independently of the geographical location, the HMMN unit is structured along 2, interconnected, themes: Fisheries dynamics (Dynamique des pêcheries) and Fish ecology (Ecologie halieutique). In terms of upstream monitoring, besides the data collection on land and at sea dictated by public policies (e.g. the Data Collection Framework of the Common Fisheries Policy), the HMMN unit created three technical platforms dedicated to observation in Boulogne-sur-mer: a National Centre of Sclerochronology (pôle Sclérochronologie), a National Centre of Zooplankton taxonomy (pôle Zooplancton) and a technical platform devoted to marine food webs (plateforme réseaux trophiques). The National Centre of Zooplankton taxonomy is shared with another IFREMER unit (Aquaculture Resources and Environment unit, unité des Laboratoires Environnement Ressources, LER unit), the HMMN unit being in charge of the aspects related to the ichthyoplankton. Advising activities are shared between the 2 themes according to the scientific expertise required. The scientific management of the unit relies on a team composed of 1 contact person per technical platform, 2 contact persons per theme, and 1 contact person specifically dedicated to advice related to marine aggregate extractions and marine renewable energies.



Unit workforce

Unit workforce	Number as at 30/06/2012	Number as at 01/01/2014	2014-2018 Number of project producers
N1: Permanent professors and similar positions			
N2: Permanent researchers from Institutions and similar positions	14	14	14
N3: Other permanent staff (without research duties)	15	16	3
N4: Other professors (Emeritus Professor, on-contract Professor, etc.)			
N5: Other researchers from Institutions (Emeritus Research Director, Postdoctoral students, visitors, etc.)	2	2	2
N6: Other contractual staff (without research duties)	3	5	0
TOTAL N1 to N6	34	37	19

Percentage of producers	100 %
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Although education is not part of IFREMER's official mission, the HMMN unit has been involved in education activities, mostly through research training. From 2008 to 2011, scientists of the HMMN unit supervised 7 first-year Master students, 16 second-year Master students, 4 last-year engineer students and 5 undergraduate students. Moreover, 8 PhD students were supervised by scientists of the unit, among which 2 were co-supervised together with foreign institutions: 1 with Exeter University in the UK and the other 1 with CSIRO (The Commonwealth Scientific and Industrial Research Organisation) in Australia. The unit also hosted 9 post-doctoral researchers.

Unit workforce	Number as at 30/06/2012	Number as at 01/01/2014
Doctoral students	3	
Theses defended	4	
Postdoctoral students having spent at least 12 months in the unit*	2	
Number of Research Supervisor Qualifications (HDR) taken	2	
Qualified research supervisors (with an HDR) or similar positions	2	4



2 • Assessment of the unit

Strengths and opportunities

The unit has over the past period shown a strong development both in the progress of implementing a programme of data collection, advice and research activities and in developing a vision on future developments. The science plan for the coming period emulates a robust understanding of important (policy) themes and linkages with the science requirements for the further development, implementation and monitoring of policy.

Being located in the middle of an important Eco-region (between the Channel and North Sea) provides ample strength, both for developing science and for international cooperation. This also makes the work of the unit highly relevant in both the policy arena and the field of monitoring and advice. In this, the unit demonstrates a strong understanding of the link between relevant (policy) questions, advice and scientific work.

In particular the unit has developed a leadership position in the Ecosystem Approach to Fisheries Management discourse which is a good basis for further (inter)national collaboration. An opportunity the unit may utilise is the further increase in cooperation at the National level with other Joint Research units.

The otoliths and plankton lines have developed technical tools and data which can be utilised in further scientific development. The examples of how knowledge generated in the unit was utilised to produce communication material (books, DVD) was considered to be a great strength and opportunity for future action.

The unit has a good knowledge of the local fisheries practices, environment and socio-economic context. This knowledge is increasingly expanded into other areas of marine activities.

Weaknesses and threats

Whereas the integration of data collection, and of advice together with science can be very stimulating by creating several cross breeding opportunities it also holds a threat. Firstly the three types of activities all come with a separate dynamic of demands and requirements. Work for any of the three activities can be affected by calls from the other, hence competing, tasks.

The amount and composition type of the available workforce can be a concern; f.e. availability of technicians across the different fields of work. In addition, especially within a relatively small research group there is an eminent risk of losing important personnel especially scientists carrying the lead in specific themes. This can immediately influence the strength of the specific themes and hence affect the implementation of scientific projects.

In addition to this the AERES review panel identified an insufficient administrative support to the team with respect to setting up (European) projects. This concerns both capacity and expertise.

Continuity and institutional memory in the unit, especially in the field of advice on the local and regional scale, remains a challenge. In addition the setting and follow up of time series of data, for example in the line of sclerochronology, is a concern. Also the sustainability and visibility of the technical platforms is tied to the type of research for which it is used: this relation should be safeguarded. The AERES review committee agrees with the concern expressed relatively to the sustainability of at-sea time series of survey cruises in the specific areas of research.

The fact that the unit is split over two geographical locations at a considerable distance of each other can be perceived as both a weakness and a threat to the continuity of the unit. Although many efforts are undertaken to promote interactions between the two sites (such as attending the 'scientific coffee' via video conference link) face to face interactions, which are deemed necessary for a continued well-functioning of the unit, remain limited as a result of the bi-location of the unit.

Recommendations

The growth and development experienced by the unit during the past period should be consolidated. This has to include the anticipation of changes in personnel. On the one hand, growth of the scope of programmes will bear on the necessary availability of resources. On the other hand this will require for the arrangement for the transmission of knowledge between the workers.



Caution should be taken relatively to the number and size of programmes planned. It is recommended not to over-estimate the capacity and possibilities of implementation of programmes in the unit. Overselling the unit can back-fire when being granted a large portion of work. Growth of the unit's workload should keep in pace with the development of the unit's expertise and implementation capacity. In addition, running after the next project today to keep up funding of research lines tomorrow can hinder utilising to its fullest the results of the current set of projects at hand.

It is recommended to consider the development of support to the team in terms of administrative support for further development of (European) projects, both in terms of capacity and expertise.

Scientific exploitation and dissemination of research results should be enhanced. Use of all available data including old data sets should be further explored. We stress that although due to lack of (storage) capacity old research data and material are discarded after a certain amount of time, this does hinder the building up of appropriate time series that could facilitate further research (for instance with respect to the otolith analysis).

Finally it is recommended that, resources providing, the number of students, PhDs and post docs is increased.



3 • Detailed assessments

Overall the assessment committee finds the progress of the unit made over the past 5 years very impressive in both the development of the themes, the implementation of the work and the scientific production.

Assessment of scientific quality and outputs

- In general the scientific quality of the work and the output is perceived as very convincing. There is a proper mix of publications, presentations and peer reviewed articles. Publication numbers are growing impressively. Over the review period the unit has produced 42 peer reviewed articles and 9 books/chapters. The bulk of this scientific production lies in providing input to conferences (82 papers, presentations, posters) and reports (71).
- The unit's emphasis consists of applied science. Applied science (data collection and advice) and the production of scientific analyses are well integrated. However a general concern remains the fine balance between the three strands of work: data collection, advice and scientific research.
- The integration of multidisciplinary approaches to research themes is very impressive. The unit has been in the forefront of taking up data sampling and advice practices to become the solid basis of scientific analysis.
- In the themes taken up and further developed by the unit, the unit reaches the standards of other leading institutions in Europe. The unit is at the front edge of developing an integrated ecosystem approach to fisheries management definitely in France and at the general level of development in Europe.
- The unit's expertise is at the required level of the main peer institutes in Europe. Some of the unit members are very active in producing (peer reviewed) publications. All staff members (scientists, researchers and technical assistants) are involved and contribute to the expertise increase and are involved in the scientific production.

Assessment of the unit's academic reputation and appeal

- HMMN is a fairly newly established unit in the scientific field. It has great potential to develop into a significant centre. This can be achieved by building up stability in staff numbers and building up a scientific track record.
- The unit is a growing entity both in size and in reputation despite the fact Boulogne-sur-mer is not in general perceived as a very conducive place to live with respect to research. Hence the themes chosen and the way chosen to implement them do have appeal to the science community.
- In each of the relative fields the unit and its individual scientists have built up a reputation.
- The production of out-reach material greatly contributes to the visibility and appeal of the unit.

Assessment of the unit's interaction with the social, economic and cultural environment

- The unit with respect to the relevant production units is adequately linked to both a social, economic and cultural surrounding. The centre of Port-en-Bessin is especially nicely embedded in the local community.
- The social and economic interactions with the local community are closely incorporated in the scientific work.
- The unit puts in effort to appropriately communicate with the wider social-economic environment.
- With a total number of 53 expert advice pieces given to the local communities and to the local, regional and national authorities over the 2008-2012 period, the unit clearly has a distinct role and is evidently interacting with the social, economic and cultural environment.
- At the international level the unit is clearly embedded in the relevant scientific, social and economic advisory fora. With a total of 158 missions over the 2008-2012 period, and on average 34.5 missions per (full) year to such institutions as ICES, STECF, FAO, CGMP and RAC and relevant scientific working groups, the unit plays a noteworthy role in the European and international scientific and policy arena.



Assessment of the unit's organisation and life

- The fact that the unit very much operates as a single integrated and motivated team shows that the unit's organisation is well on track. There is a very good relationship and communication between technicians and scientists.
- However, there seem to be mixed feelings about the integration over the two geographical locations and the developments of the two entities.

Assessment of the unit's involvement in training through research

- From 2008 to 2011, scientists of the HMMN Unit supervised 7 first-year Master students, 16 second-year Master students, 4 last-year engineer students and 5 undergraduate students. Moreover, 8 PhD students were supervised by scientists of the Unit, among which 2 were co-supervised together with foreign institutions: 1 with Exeter University in the UK and the other 1 with CSIRO (The Commonwealth Scientific and Industrial Research Organisation) in Australia. The Unit also hosted 9 post-doctoral researchers.
- There is a will to increase the number of students, however there are limits to fund master students. With the increase in number of qualified people (HDR) more PhDs can be accommodated.
- Although not the principal objective researchers are involved in teaching activities elsewhere.

Assessment of the five-year plan and strategy

- A very nicely and cleverly thought-through plan. The plan is both convincing and having a high level of ambition.
- Within the plan the several strands of research, united into three themes, are nicely incorporated.
- Noting the level of funding and the amount of available human resources the ease of implementation can be queried. The plan is feasible if implemented with the current set of available resources and foreplanned developments. Hence the implementation will for a large extent hinge on the premises of resources being made available.



4 • Conduct of the visit

Visit dates:

Start: 10th of October 2012 08:15

End: 10th of October 2012 18:30

Visit site: Boulogne-sur-Mer

Institution: Unité Halieutique Manche Mer du Nord, Département Ressources Biologiques et Environnement

Institut Français de Recherche pour l'Exploitation de la Mer – IFREMER

Address: Centre de Manche - mer du Nord

150, Quai Gambetta - BP 699

62321 Boulogne-sur-Mer - France

Specific premises visited: Research Station

Specific points to be mentioned:

It was a very conducive visit in an open and constructive atmosphere. There were no unexpected or disturbing events during the visit.

5 • Statistics by field: SVE on 10/06/2013

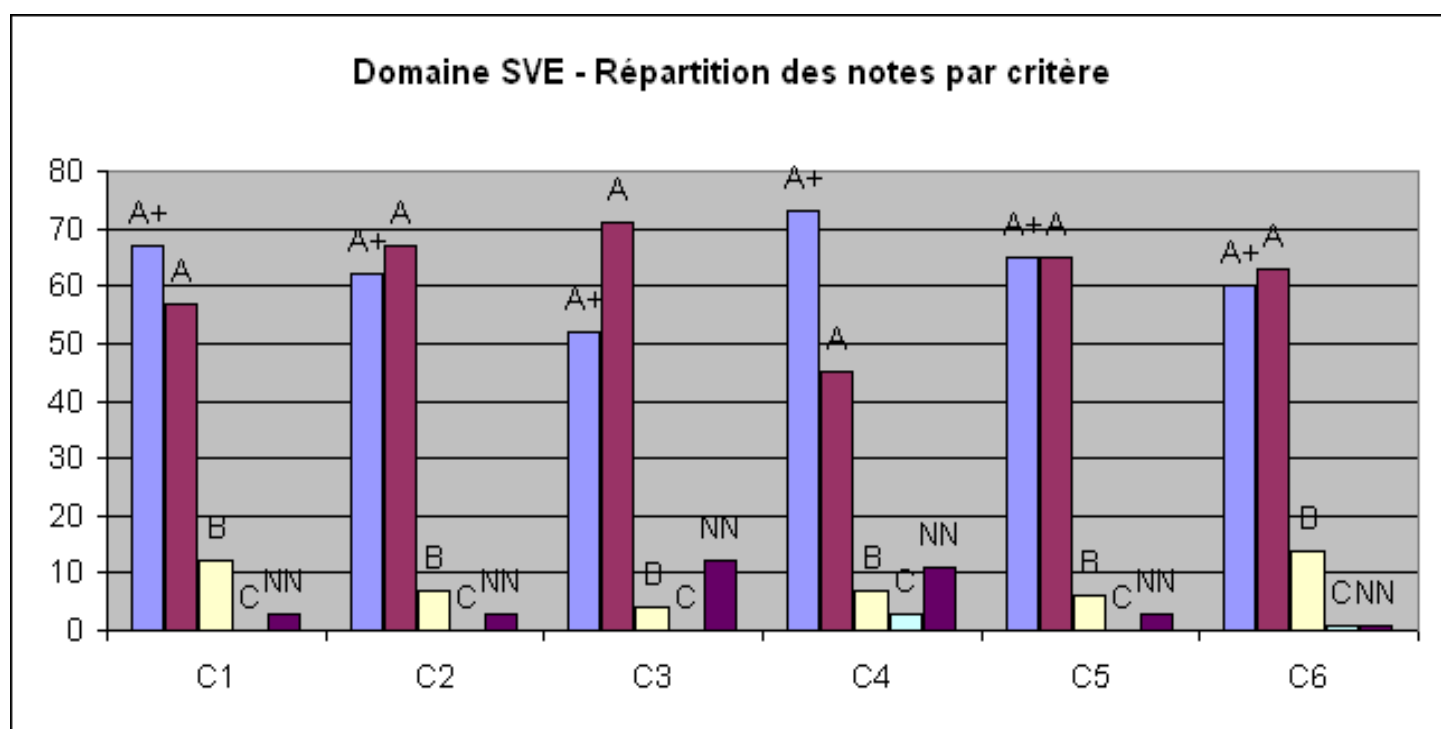
Grades

Critères	C1 Qualité scientifique et production	C2 Rayonnement et attractivité académiques	C3 Relations avec l'environnement social, économique et culturel	C4 Organisation et vie de l'entité	C5 Implication dans la formation par la recherche	C6 Stratégie et projet à cinq ans
A+	67	62	52	73	65	60
A	57	67	71	45	65	63
B	12	7	4	7	6	14
C	0	0	0	3	0	1
Non Noté	3	3	12	11	3	1

Percentages

Critères	C1 Qualité scientifique et production	C2 Rayonnement et attractivité académiques	C3 Relations avec l'environnement social, économique et culturel	C4 Organisation et vie de l'entité	C5 Implication dans la formation par la recherche	C6 Stratégie et projet à cinq ans
A+	48%	45%	37%	53%	47%	43%
A	41%	48%	51%	32%	47%	45%
B	9%	5%	3%	5%	4%	10%
C	0%	0%	0%	2%	0%	1%
Non Noté	2%	2%	9%	8%	2%	1%

Histogram





6 • Supervising bodies' general comments

Objet : Dépôt d'observation-rapport
d'évaluation *S2PUR140005264* –
Halieutique de Manche Mer du
Nord– 0922262J

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Boulogne-sur-Mer, January 18, 2013

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Dear Madam, dear Sirs,

General comments on the AERES report on the Unit "Halieutique Manche-Mer du Nord" of IFREMER

We thank you very much for providing us with the evaluation report of our Unit. We are more than content with the report as it is and do not have any general comment to bring out. We would like to warmly thank the evaluation committee for its receptiveness and a very constructive exchange both during its visit and through its report.

Sincerely,



Le Directeur Général Délégué
Patrick Vincent