Action Plan accompanying the recommendations in the

"Assessment report: Animal Sciences Group- Wageningen Research"

ASG Management Team, 13 May 2024

As part of the quality cycle, the WR institutes are evaluated every four years by an external assessment committee. The main purpose of the visit is to assess the (inter)national position of the institute with regard to scientific quality, economic and social impact and viability of the organization. The assessment helps to monitor and improve the overall performance of the WR institutes and their long-term strategy development.

The assessment is based on a thorough self-evaluation report from the institute and a site-visit by the peer-review committee. The peer-review committee is asked to report its findings and provide advice to the Board of Directors of the WUR and to the management of the institute and the Science Group.

The assessment visit of ASG-WR took place in the fall of 2023, with a visit of the assessment committee to our three institutes from 22 November to 24 November.

The assessment committee consisted of:

- Mrs. Renée M. Bergkamp LL.M (chair of the review committee)
- drs. Pim Visser, Chief Executive VisNed
- ir. Reinier van den Berg
- prof. Charlotte Lauridsen, Head of Department, Department of Animal and Veterinary Sciences, Aarhus University
- prof. Arjan Stegeman, professor of Farm Animal Health, Utrecht University
- dr. Muriel Vayssier-Taussat, head of the team vector-borne bacteria at INRA
- prof. Simon Jennings, Theme Lead for 'food from water' at the Centre for Environment, Fisheries and Aquaculture Science, Lowestoft, UK and vice-chair of the Advisory Committee at the International Council for the Exploration of the Sea (ICES)
- Hester Maij, MBA, Director Public & Regulatory affairs at Royal Friesland Campina (okt 2019 nov 1st 2023)
- Drs. Mariette Huisjes (secretary)

The committee provided ASG with a number of useful recommendations, for ASG as a whole as well as for our three research institutes specifically. On the following pages, you will find four tables presenting the response for each part to the recommendation as well as the related actions.

Th	The Animal Science Group			
Recommendation		Comment/Explanation	Action	
1.	Make a constant and strong effort to implement One Wageningen. Identify and address barriers for seamless integration between fundamental and applied science in practice. Incorporate tools and skills for optimizing internal collaboration into the human resources strategy	presents a compelling vision. However, in practice, the committee	This issue is recognized across WUR and will be taken up in the new strategic plan of the WUR. At ASG, we will stimulate collaboration by setting up working groups on specific themes (such as eel or animal welfare) across the axis from applied to fundamental science. We also intent to set up a new investment programme that stimulates collaboration across WR and WU. Practical barriers identified during these collaborations will be dealt with where possible.	
2.	Make sure that the narrative for the Animal Sciences Group and the strategic plans that are currently in the making demarcate well- defined research foci. Communicate them clearly.	In the opinion of the committee, if the area covered by ASG research is too broad, there is a serious risk that the expertise will be diluted, less distinctive and less recognizable. We agree with the committee that focus is necessary.	We will translate the current focus areas in missions with clear descriptions how we contribute to these missions with fundamental and applied science. This will provide more focus in our work, make it distinctive and provide a basis for making choices what opportunities to go for without being too restrictive.	
3.	Draw up a long-term facilities investment plan at the level of the Animal Sciences Group. Align it with the chosen research foci and the requirements posed by the statutory tasks that the institutes contribute to. Benchmark with other public research institutes or private companies and explore options for facility sharing. Prepare yourself for the political challenges of acquiring government funding for facilities. Invest in public affairs. Engage with NGO's.	We believe that animal facilities will be needed for our future research. We foresee that the type of experiments will change and we have to include this in our strategy.	In Q1 2024 two working groups on facilities delivered their final reports. This provided input regarding new investments in facilities, which will be part of our next strategic plan. Viability, innovation, efficiency and sharing will be important points of attention. We will identify key-NGO's and include them in dialogues on future perspectives in animal sciences.	
4.	Review the implications of the reduced knowledge base budget compared to other groups within WUR. Consider whether the knowledge base budget for statutory tasks that has not been spent by the end of the year may be invested in much-needed capacity building to anticipate on future crises.	We agree with the committee. The idea behind knowledge base is to be able to develop new knowledge which can be applied in research in the future in our focus areas.	The programming at WUR and the negotiations with LNV are a responsibility of the central WUR organization. We will start up discussions within WUR regarding this topic and plea for more multi annual programming.	
5.	Closely monitor your price-quality ratio and the way commercial offers are presented	We agree that this balance is important to keep customers/sponsors satisfied.	We will initiate an analysis of tariff structure of the TO2 institutes.	

Wa	Wageningen Bioveterinary Research			
Re	commendation	Comment/Explanation	Action	
1.	Develop a strategy encouraging staff to publish scientific output in peer reviewed and open-access journals (avoiding predatory journals).	WBVR has a strategy regarding this, as laid out in our annual plan. We discuss this strategy with project leaders in regular meetings as well as during R&O talks. Points of attention are the focal topics that we want to publish on, as well as the type of journals we want to publish in. The project leaders have had training by the library in this regard.	We will encourage staff to publish more and prioritizing publication as an end result of their projects. We will determine a KPI regarding this in our annual year plans and measure our progress throughout the year. Additional actions will be undertaken if we are getting behind on reaching our goal. If necessary extra support will be organized to enhance scientific publications. This will be incorporated as a KPI in our annual plans.	
2.	Focus the research themes to maintain excellence in the selected research areas, for instance by setting up a scientific agenda for the next four years.	WBVR has defined four themes in which we want to maintain or build our excellence. The 4 themes (One Health, Healthy Livestock, Hightech animal models, Diagnostics) are defined where WBVR will be maintain or gain excellence or become front runner.	We will develop a research agenda around the four WBVR themes. From the research agenda, specific actions will be defined, and accordingly monitored in the annual report. In addition, a clear communication strategy on focus themes will be developed. In relation to the point above, more focus will also be on scientific publications. On the 4 themes, a research agenda and actions are defined in Q1 2024, and accordingly monitored in the annual report. This will be monitored via strategic and communication goals for the focus themes in annual year plans over the period.	
3.	Starting from the selected research themes, develop a clear strategy to foster cooperation with Wageningen University, WLR and institutes outside WUR.	We agree with the committee that cooperation along our research themes with Wageningen University, WLR and institutes outside WUR can be highly beneficial. Of the four WBVR themes, the theme of diagnostics is not easily suited for such cooperations, the other three are.	On the three themes excluding diagnostics, connection with WUR will be developed, using the network of our managing director and the business unit manager. We will also actively make use of projects within NLAS in which such collaborations are already established. Combined projects like KB, NLAS and PPS or EU projects to start with, as well as continued participation in for example joint initiatives such as Netherlands Centre of One Health and Kennisplatform Veehouderij en Humane Gezondheid. The collaborative projects with internal WUR or external partners will be monitored via annual year plans.	
4.	When making the above strategic alliances, consider substantiating them in the form of parttime professorships of WBVR staff at universities.	We agree with the committee	We will make the connection with chair groups at WU and UU, specifically coupled to the focus themes as defined by WBVR. This connection ideally takes the shape of shared PhD students or other shared staff/ part-time professorships. We aim for an increased number of combined R/U personnel units compared to 2023 on focus themes topics.	
5.	As the theme of next generation alternatives to animal models has the objective to decrease animal use, put indicators in place to assess the effect of setting up these new tools over time	When developing, using or selecting suitable animal models, WBVR has a strong focus on the 3R's (reduce, refine and replace). WBVR researches the development of alternative methods for animal testing, using for instance sensoring and data analyses and in vitro/ ex vivo systems like complex cell systems – or organoids. By applying these novel technologies, WBVR will reduce the number of animals used in studies.	WBVR will focus on refinement and reduction of animal experiments, with the use of sensors, models and in vitro or ex vivo models. Important is that the statistical power of the animal experiments will remain as high as needed, but the number of animals or the level of discomfort is reduced. As indicators, we will monitor the number of projects where we included CCC/sensoring and the use of data (data from (previous) research, newly generated data and/or data available from external sources that can contribute to the statistical output	

6.	Specify your internal and external narratives to fit the selected research foci and societal challenges. Develop a communication strategy to actively engage in the debate. Not only report what you are doing, but try set the agenda.	We agree that we should be active setting the agenda with LNV en VWS by attending specific discussion groups.	Strategic networking and being involved is very important to set the agenda. To achieve this, we will have a spokesperson in place to attend specific discussion groups with LNV and VWS and ensure they are seen and heard, and support them in their needs to represent WBVR where required. We aim to be actively invited to discussion groups on the themes of the WBVR strategy, such as Deskundigenberaad Dierziekten or open debates on animal welfare eg taking place at WUR and/or UU. Furthermore WBVR will actively explore other than the known networks relevant to the WBVR themes to make connections to emphasize the knowledge available at WBVR
7.	Actively engage with your staff to embed the future direction and its strategy within the institute.	We have expertise teams in place specifically for this engagement	The expertise teams will be used for regular strategic discussions within WBVR. The annual plans of these teams will be renewed in 2024 and this point will be taken along in the development of these plans.
8.	Cherish your community and working atmosphere, but at the same time foster a more open culture to stimulate working with others inside and outside WUR and become more attractive for international staff.	This is coupled to point three and four as well.	We will actively stimulate internal (WUR & WBVR) collaboration and invite people to work more at different locations. We will make more effort to give attention to and celebrate collaborations. As described in our year plan, we will organize working groups on special topics and actively invite specific colleagues from WUR departments to join in and elaborate on collaboration. The first initiative is taken on animal health & welfare in conjunction with WLR in 2024
9.	Unburden scientific staff from administrative tasks as much as possible to make them more efficient in the scientific work they are good at and at the same time increase the level of administrative service to your clients. Business developers could help negotiate the contracts.		
10	 Engage with your (major) clients to identify how to make them long term partners. 	Our director has a strong relation with our major clients, which she will consolidate towards the future. She will build a relation with major clients, defined as a client commissioning at least 3 TIME/12 months of research	We will plan a yearly meeting with our major clients (~5) to engage with current events and progress on projects. These meetings will also be used for agenda setting when possible (see point 6). This is an ongoing action, monitored in strategic acquisition meetings of MT-WBVR.

Wagen	Wageningen Livestock Research			
Recomi	mendation	Comment/Explanation	Action	
rese	ke more use of (scientific) publications to advocate your earch and research interests. It will help to increase your pact and attract new clients.	The committee notes that WLR publishes in top academic journals and that we achieve our KPIs regarding publications. WLR will identify how it can use this strength (scientific impact) to further increase societal impact and to attract new clients.	output and scientific impact in its communication strategy towards society and stakeholders, and its marketing	
eme	velop a strategy to cope with the potential impasse that erges when private companies you commercially depend on do not share your ideals for transforming the livestock tor	WLR can be a very strong partner in transforming livestock production chains to become more sustainable (ecological, economic and social). WLR should be aware that different stakeholders can be in a different phase of transformation. For example, stakeholders focusing on an integral sustainable increase of food production and self-sufficiency in different regions of the global South, versus focus on just and safe transitions and degrowth in some European stakeholder communities.	We will convey that WLR can add value to different transition pathways, and different stages of a transition towards more sustainable food systems. In addition, we will further strengthen multidisciplinary collaborations across sciences (natural, technical, social, economic). Lastly, we will customise account management acknowledging the different transformational stages as well as the connected research and innovation needs of our clients and stakeholders.	
_	n the availability of facilities with your research ambitions if the choice of animal species that you aim to work on.	WLR does not only focus on animal facilities for its future research, but on other types of facilities for future animal sciences as well (e.g., complex cell systems, data science and modelling facilities, sensor technologies, field labs etc.). Our policy is to reduce, replace and refine animal experiments. We develop innovative approaches and methodologies which are an alternative to more invasive research methods in animal experiments.	WLR aligns at ASG and WUR level to develop a future vision and strategy on facilities. This process already started in 2023 by establishing an ASG working group to develop a vision for the facilities that will be needed for animal science in the next decade. This includes views on the future of both animal facilities and other types of facilities. These range from complex cell systems, air quality measurements to computer modeling tools. In this vision a targeted vision and strategy per animal species will be elaborated. We will work to strengthen internal WUR-collaborations and external partnerships (national and within EU) for facility sharing. The access to future-oriented facilities is more important than the actual ownership of such facilities.	
limit com	ke strategic choices to decrease your dependency on a ited number of parties, building on your unique npetencies to help use animals for food production in a ust and sustainable way.	Expand private and public-private market position, to decrease dependency from LNV-funding.	We will increase <u>new</u> business development capacity, and business development capacity towards private and public-private markets. In addition, we will increase entrepreneurship and commercial skills of researchers and project leaders, for example by organizing innovation challenges, by providing commercial skills training and by further strengthening a 'value creation focus'. This objective has already led to the appointment of a new business developer within WLR (starting date April 1st, 2024) focusing on our new business strategy and extension of our contract research portfolio for private markets (industry).	
-	oport your strategic choices by good marketing and ountmanagement	Marketing and account management are included as key elements in our (multi) annual plans for 2024 onwards. Strategic personnel planning aligned with vision and strategy.	Marketing, account management, and business development are well embedded in our multi-annual plan 2024-2027, annual plans (2024 onwards) and (marketing) communication plan (2024 onwards).	

6.	Clearly identify your contributions to the transition to sustainable food production and build a strategic communication plan on this identification that targets diverse audiences.	We will be challenged to be innovators and expertise leaders on global challenges like food security, wellbeing for animals and a circular agri-food system that contributes to healthy ecosystems, while simultaneously reduce impacts of animal production on climate, environment and biodiversity. And to design regenerative concepts that will even restore nature and sequester carbon. Nationally and in Europe, we work on priorities like developing animal centred livestock systems where animals experience positive emotions and animal wellbeing is secured. In the next decade, the ethical and societal considerations on the role of animals in society, the food system, and the ecosystem will change. This includes ethical and societal perspectives on animal science as such, and the use of animals in	WLR has a marketing/communication plan aimed at increased visibility, impact and outreach. We will work towards further professionalisation of our press office and communication team, based on increased awareness of our diverse target groups and audiences. This recommendation is partially aligned with recommendations nr 2 and 5. The actions under 2 and 5 are also relevant regarding recommendation 6.
7.	While executing projects, stick to your core qualities and be proactive and timely in finding complementary expertise.	research. This recommendation is closely related to recommendation nr 8.	We will seek collaboration within ASG and WUR in a timely and targeted manner. In addition, we will actively strengthen our network (internally), shorten lines, and actively develop and execute multidisciplinary programs, like ASG and WUR investment programs and knowledge base programs. We organise and contribute to theme meetings, to stimulate interactions between complementary expertise. Also, we will set up and further strengthen expertise teams across research departments, for example "DataScience@WLR".
8.	While working on multidisciplinary themes, do not forget to maintain your core monodisciplinary expertise at the highest academic level	Our skills and expertise for systems design and integrated studies need to be advanced, while our core disciplines need further strengthening. Without a strong domain expertise, we will not be able to take a leading role in multidisciplinary research challenges.	Ownership for our core expertise is well-secured in our research departments. We will further develop our core expertise on animal breeding & genomics, animal health & welfare, animal nutrition, grassland and grazing, animal farming systems, emissions and manure valorisation. We will seek out internal collaboration with the relevant chair groups at Wageningen University. Within the departments, small expertise teams are developed to think and work on the future development of the field of expertise, required methodologies and partnerships. Such teams also strengthen social cohesion, which is an important pillar to be successful and enjoy your work (environment). We will actively seek and/or create opportunities in ASG and WUR investment programs, and in knowledge base (KB) programs, to further develop our core monodisciplinary expertise.

Recommendation C	Comment/Explanation	Action
are sufficiently ambitious for a nationally and internationally significant marine science institute and, if not, identify and adopt procedures that will accelerate growth in rates of peer reviewed publication, including consideration of time provided with the sufficiency of the provided with the sufficiency of the	Such assessment was done as part of our self-evaluation, and our target is ambitious. Publications are a key focus area of WMR and we support this with writing courses and a Personal Research Interest (PRI) call allocating science hours specifically for writing.	We expect our peer-review-paper production to increase as a result of our current young-talent workforce, developing into a more experienced group of (senior) scientists (also see item 5). The PRI-procedure was evaluated early this year, and conditions were adopted to stimulate (i) coaching of early-career scientists by more experienced seniors, and (ii) encouraging collaboration. We will assess whether current targets for peer-reviewed publication are sufficiently ambitious for a nationally and internationally significant marine science institute and, if not, identify and adopt procedures that will accelerate growth in rates of peer reviewed publication, including consideration of time provided for writing and mentorship of early career authors.
	These are good suggestions, that we will include in the implementation of our new development plan.	We will encourage using the opportunities for writing (concept) peer review papers for clients. Teaching our staff for better writing of science advice and executive summaries. This in close connection with our main client LNV (topic discussed earlier this year). We will assess, with clients, whether reports are appropriately oriented to the audience and adequately communicated, and also if there are any opportunities to transition to a reporting model that comprises one or more peer reviewed publications alongside a more accessible policy-oriented executive summary and relatively short overview report
3. Further involve clients and other stakeholders in future strategic planning using WMR influence and convening power. Seek for close collaboration with clients and work towards 'Solving problems together'. Safeguard the specific achievements, visibility and functionality of the Yerseke facility since its revitalisation in 2016, especially in relation to the Delta Climate Center process.	We agree with the recommendation. This will be a logical and integral part of our ways of working and new development plan.	WMR will be actively involved in the DCC and DCC-activities: Cas Wiebinga will take the lead, together with Gerlinde van Vilsteren, in coordinating WUR input and activities in the DCC. Close connections with our major clients will be organized through account management/managers, as well as specific events and activities. We will further involve clients and other stakeholders in future strategic planning using WMR influence and convening power. Seek for close collaboration with clients and work towards 'Solving problems together'. Safeguard the specific achievements visibility and functionality of the Yerseke facility since its revitalisation in 2016, especially in relation to the Delta Climate Center process
4. Ensure a constant flow of knowledge and information on fisheries and other science topics from WMR to the Ministry of Agriculture, Nature and Food Quality, to engage and support new personnel at the ministry and to help enable continuous and effective working relationships when personnel change roles	LNV is one of the most important clients of WMR, not just for fisheries related topics.	Regular meetings with LNV will be used for this, for account-management, specific topics and projects. LNV account management will be led by Tammo, also on topics beyond fisheries: nature – North Sea, Caribbean, freshwater ecology, governance (together with WECR). We will ensure a constant flow of knowledge and information on fisheries and other science topics from WMR to the Ministry of Agriculture, Nature and Food Quality, to engage and support new personnel at the ministry and to help enable continuous and effective working relationships when personnel change role

5.	Develop pathways to provide opportunities for career progression of some scientists into senior science leadership and management roles with capacity to represent and facilitate broad and cross- cutting areas of science and advice.	WMR has a relatively young work-force and it makes sense to offer and create opportunities for development to help develop them into a more experienced group of (senior) scientists.	Coaching, development and career perspective will be key items in our new development plan. The MT will regularly review our experts/expertise in relation to current and future topics and business development. We will develop pathways to provide opportunities for career progression of some scientists into senior science leadership and management roles with capacity to represent and facilitate broad and cross- cutting areas of science and advice.
6.	Develop a documented continuity policy as a risk management measure, to enable rapid and effective responses, and business continuity, in the event of departures from the management team.	In 2023 the MT changed considerably, with 3 new people out of 4. This was done in a very short time-span (half a year) by a combination of ad-interim MT positions filled with WUR-colleagues and external people, effectively supported by headhunting agencies. Therefore we do not see the necessity for a formal-documented continuity policy.	Our director will focus on transfer of network and expertise to the new MT members and seniors within WMR. We will develop a documented continuity policy as a risk management measure, to enable rapid and effective responses, and business continuity, in the event of departures from the management team
7.	Actively maintain a modern HR policy, recognizing the expected labour shortages in the coming decades.	Last year, WMR had 20+ vacancies that were all filled with (young) scientists. Only for more senior or specialized positions, finding the right candidate may sometimes be difficult – and this has always been the case.	We will develop a new HR-policy in 2024. We will actively maintain a modern HR policy, recognizing the expected labour shortages in the coming decades
8.	Invest in strategic acquisition, in addition to having individuals to pursue projects. What are the projects and who are the clients/partners for the future? Identify them and approach them.	Most promising real-new clients include Energy companies that are interested/involved in Wind at Sea developments.	We have an appointed account manager for such new clients. We will invest in strategic acquisition, in addition to having individuals to pursue projects. What are the projects and who are the clients/partners for the future? Identify them and approach them
9.	Assess where new technologies and cooperation with partners can increase the reliability and cost-effectiveness of data collection and work with partners to implement.		AI-Data Science will be taken on with our WUR-colleagues, in particular through the WDCC and BUM-group. The AFR team is instrumental in this effort. We will assess where new technologies and cooperation with partners can increase the reliability and cost-effectiveness of data collection and work with partners to implement