March 2021



On our way to become HR excellence in research

Internal analysis and action plan

2021



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Introduction

Wetsus has submitted a request for recognition as an organization with excellent HR policies for researchers. After approval, Wetsus may then use the HR logo "excellence in research". The European Commission wants to promote openness and transparency on labour markets for researchers. To this end, Wetsus has drawn up a charter and code of conduct for the recruitment of researchers. These two documents contribute to making an academic career more appealing and to promoting employment. For further information, go to charter and code of conduct.

The charter and the code of conduct contain forty basic principles. For the implementation of these, a procedure has been drawn up that includes an internal analysis of regulations, the methodology and how to draft a plan for improvement. In the request as submitted to the commission, a GAP analysis is used to detail our HR policies in a plan for improvement that includes necessary actions. This involved carefully examining 40 basic principles in the charter and the code of conduct. Wetsus endorses the principles in the charter and the code of conduct. Mobility is one of the spearheads in the HR strategy, with an open and transparent labour market promoting career prospects for researchers.

Research centres that act in line with the principles of the charter and the code of conduct acquire the logo HR excellence in research. Wetsus has submitted the request so it may be granted permission to use the logo once the procedure is complete. The internal analysis and the plan for improvement (based on the internal analysis) are part and parcel of the request.

After approval, Wetsus will carry out a self-assessment after two years into the progress of the implementation of the charter and the code of conduct and into the progress of the plan for improvement.

Organizational information

Wetsus, European Centre of excellence for sustainable water technology is a facilitating intermediary for trendsetting know-how development. Wetsus creates a unique environment and strategic cooperation for development of profitable and sustainable state of the art water treatment technology. The inspiring and multidisciplinary collaboration between companies and research institutes from all over Europe in Wetsus results in innovations that contribute significantly to the solution of the global water problems.

Wetsus' scientific research program is defined by the private and public water sector and conducted by leading universities.

Organization numbers

The organizational data consists of figures that refer to the number of employees currently present at Wetsus. This number is expressed in FTE (full-time equivalent).

Staff and students	FTE
Total researchers = staff, fellowship holders, bursary holders, PhD. students either full- time or part-time involved in research	82,95
Of whom are international (i.e. foreign nationality)	64,35
Of whom are externally funded (i.e. for whom the organisation is host organisation)	46,7
Of whom are women	38,6
Of whom are stage R3 or R4 = Researchers with a large degree of autonomy, typically holding the status of Principal Investigator or Professor.	3,5

Of whom are stage R2 = in most organisations corresponding with postdoctoral level	3,35
Of whom are stage R1 = in most organisations corresponding with doctoral level	48
Total number of students (if relevant)	25
Total number of staff (including management, administrative, teaching and research staff)	147,85

Research funding

The table below shows the data regarding Wetsus' research funding. First, the total annual budget is indicated and then it is indicated from which annual funding these amounts come.

Total annual organisational budget	€15.30.000
Annual organisational direct government funding (designated for research)	€9.400.000
Annual competitive government-sourced funding (designated for research, obtained in competition with other organisations – including EU funding)	€2.500.000
Annual funding from private, non-government sources, designated for research	€3.400.000

Strengths and weaknesses of the current practice

During the HRS4R project, the entire HR policy of Wetsus was examined and compared with the principles propagated by the project. On the basis of the gap analysis that was drawn up at the beginning of the project, a clear strength and weakness analysis has been created about Wetsus' current HR policy. The strength and weakness analysis is based on the four main topics of the HRS4R project. All these topics are divided into several principles, so that the main topics can be properly analyzed.

Ethical and professional aspects

The strengths of the current ethical and professional aspects of the HR policies within Wetsus are all the aspects that are treated in the Charter and Code. Wetsus has implemented all the principles that are provided by the Charter and Code, because most of this principles are also covered in the Dutch Code of Conduct for Scientific Practice. This code explains standards for best practice within research organizations and universities. An example of a number of principles in which the Dutch Code of Conduct for Scientific Practice has been implemented is ethical principles, professional responsibility and good practices in research. The Dutch code of conduct consists of ethical codes to ensure that lecturers and researchers have standards with which they can ensure that good academic education and research is guaranteed and to provide a common basis for institutions that play a social role. Furthermore, Wetsus also has IPR regulations. This regulation guarantees the following subjects;

Rights regarding theme research results	Research outside framework of program and participation agreement
Enforcement intellectual property rights	Confidentiality
Use and commercial exploitation	Publications
Acquisition and termination of theme patents	Dispute resolution and applicable law

The regulations drawn up in the IPR regulations are specifically aimed at Wetsus and ensure that the ethical and professional aspects of the investigations within Wetsus are guaranteed. Wetsus also has five core values. These values are; Innovation, Partnership, Joy, Cooperation and Reliability. Especially reliability is directly linked to the concept of professional attitude. Within Wetsus reliability is about our ability to keep promises and providing declared standards. The five core values are an important topic within Wetsus and the values are reflected in all operations in that organization. Furthermore

Wetsus also has provided a research manual. We stress that this research manual is meant as a tool for researchers to find their way into the procedures that together comprise the Wetsus way of doing research. The research manual is a clean and plain manner to provide the employees within Wetsus of the contractual and legal obligations regarding working conditions, IPR and conditions related to sponsors and funders. At least Wetsus is required to follow the Dutch Act on Equal Treatment to ensure that there is no discrimination within Wetsus. To check the ethical and professional aspects and safeguards within the organization, a meeting takes place every year between employee and manager. These are the performance and appraisal interviews. These interviews addresses the research and other activities of the employee, the personal development/training of the employee and the employee provides feedback to the manager.

Recruitment and selection

The strengths of the current recruitment and selection procedures within Wetsus are that Wetsus provides the candidates multiple ways to get access to the organization. Wetsus uses various recruitment facilities, such as the WaterSeed page, the Wetsus website and the Graduation and internship page. There is also an e-mail available where candidates can send open applications and lastly, Wetsus publishes the vacancies that are currently open on various websites and social media channels. To ensure that candidates are selected in a fair manner, various rules have been drawn up with regard to organizing a selection committee, etc. An e-mail address is also available where complains can be left as the way of selection in doubt is taken. Wetsus has also implemented three different selection rounds to take care that the merit is judged qualitatively as well as quantitatively. The weakness in the current recruitment and selection procedures are transparency during the selection process in regard to the strengths and weakness of the applications from candidates and the postdoctoral appointments. At the moment Wetsus is not providing feedback to each candidate in the first rounds of the selection process. This means that Wetsus is not completely following the standards that are being carried by the European code of conduct. In case of the postdoctoral appointments, Wetsus currently does not provide an policy that exist out of clear rules and explicit guidelines. The weakness of the recruitment and selection procedures will be implemented in the action plan. Wetsus will set up several actions to provide improvement in the recruitment and selection procedures, after they have done future research to the opinions and feedback of their internal stakeholders.

Working conditions

The strengths of the current working conditions within Wetsus includes the research environment, stability and permanence of employment, funding and salaries, mobility and access to career advice. Wetsus is a non-hierarchical organization and the communication lines are quick. Furthermore Wetsus provides also several trainings to improve the communication. The research environment is very well equipped. During working hours, the researchers have unrestricted access to the state-of-the-art research and working facilities at the WaterCampus. The offices and main laboratories are in the Wetsus building, which was built in 2014 and designed to stimulate creativity. The building is accessible for persons with physical disabilities. Furthermore, the building offers ample of facilities for researchers, students and professionals to meet and collaborate in a formal or informal setting, faceto-face or remotely. The laboratories comprises a wide-range of research tools from across scientific disciplines, to foster multidisciplinary research and collaboration. The research facilities include an experimental hall and certified microbiology, wet-chemical, synthesis, and analytical laboratories. Moreover, state-of-the-art molecular, electrochemical, imaging and optic tools are available, while access to other specialized tools can be arranged through the participating universities. In addition, four demonstration sites are available for field experiments. Furthermore funding and salaries are guaranteed through the Collective Labor Agreement Dutch Universities.

The access to career advice is provided by the training/workshop 'Career Perspectives' that is offered to all the researchers in their 3rd/4rd year of the research where they focus on career advice and future jobs. Next to that, Wetsus offers coaching to all employees. The weaknesses of the current working conditions are the sabbatical leave, coaching in career development, teaching activities and the

complaints and appeals procedure at Wetsus. At the current moment Wetsus does not provide a transparent regulation for sabbatical leave. This is partly because there is little demand for sabbatical leave, which is why agreements are made on a case-by-case basis if there is a demand for it. To stimulate a transparent organization Wetsus should provide his employees with a clear regulation for sabbatical leave. Regarding to the research in the organization Wetsus should change his offer in coaching to stimulate the effectiveness of the personal development program. Wetsus should create more activities to stimulate researchers in the field of teaching. At the moment not many activities are offered to researchers to actively engage in the structuring and dissemination of knowledge. Finally, few researchers within Wetsus are aware of the current complaints and appeals procedure. The entire procedure must be re-communicated within the organization after adjustments have been made. The policy for scientific integrity must also be further provided so that this revised version can be introduced in the organization.

Training and development

In the field of training and development, Wetsus provides many resources to the researchers. First of all, Wetsus has a complete Personal Development Program. This program is a four-year program consisting of several courses. The courses offered in the Personal Development Program are; Communication, Presenting, Talents, Leadership, Supervision, Entrepreneurship and Career perspectives. All these courses contribute to the development of the "soft skills" of the researchers within Wetsus. Through the plan, the researchers not only learn to work as an independent researcher, but also learn how to make an impact on science and society. Furthermore, development is also stimulated by participating in workshops, conferences and other social network events. The development of skills required for the research is also offered by Wetsus and researchers can request this themselves within the organization. In addition to the development of researchers being stimulated by the Personal Development Plan, the researchers also have a personal Wetsus supervisor. This is their daily supervisor with whom they have a non-hierarchical relationship and with whom they can easily communicate on topics related to the research they do. Furthermore, the supervisor is a kind of coach that stimulates the researcher to reflect and provide feedback. Often a weekly meeting takes place with the supervisor and the researcher in which they discuss the progress of the research. In addition, a meeting takes place almost monthly with the university promotor, the supervisor and the researcher. In addition, a presentation is given about three times a year in which they present the progress of the research to all parties involved in the theme. To ensure that researchers continue to learn and develop, several meetings and annual reviews take place with systems to monitor the progress and to stimulate cooperation between researcher and the supervisor.

Action Plan

The Action Plan and HRS4R strategy must be published on an easily accessible location of the organisation's website.

Please provide the web link to the organisation's HR Strategy dedicated webpage(s):
URL: https://www.wetsus.nl/on-our-way-to-hr-excellence-in-research/

Please fill in a sum up list of all individual actions to be undertaken in your organisation's HRS4R to address the weaknesses or strengths identified in the Gap-Analysis:

#	Proposed Actions	GAP Principle	Timing (Month the award is granted	Responsible Units	Target and Indicators
	Free text -100 words max	Retrieved from the GAP Analysis	In months after the award is granted	-	-
1	1.1 Creation of a standard procedure to guarantee that all candidates for research positions (R1-R2) at Wetsus will receive feedback about the strengths and weaknesses of their application. A standard form to collect feedback from the evaluators will be introduced. A first version of the form has been already drafted (March 2021), and the procedure will be tested during the upcoming WaterSEED call for the selection of 9 PhD and 1 postdoc (March-June 2021)	15 Transparancy>)	M1	HR Department, Project coordinator WaterSEED, Doctoral programme management	Target: 100% of applicants to research positions (R1-R2) receive feedback on strengths/weaknesses within 3 weeks after the evaluation round (applications documents/video interview/recruiting day). Indicators: final survey to applicants for receiving feedback on the overall recruiting procedure and added value of the strength/weakness form.
2	1.2 Establish and implement a clear protocol with rules and explicit guidelines for the recruitment and appointment of postdoctoral researchers according to the European Charter & Code for Researchers. The protocol is currently in drafting stage by the HR dept., and will be sent to	21 Postdoctoral appointments	M3	HR Department, Program director, Executive board	Target: Integration of the new protocol in the Wetsus HR policy. Indicators: i) dissemination of new protocol within the organisation (via email/presentation from HR); ii) publication of new protocol on the website

	Program director and Executive board for approval				(<u>www.wetsus.nl/work</u> <u>-at-wetsus</u>)
3	2.1 Establishment and implementation of a policy for sabbatical leave. The policy is currently in drafting stage by the HR dept., and will be sent to Program director and Executive board for approval (June 2021)	24 Working Conditions	M6	HR Department, Program director, Executive board	Target: Integration of the new policy for sabbatical leave in the general Wetsus HR policy. Indicators: dissemination of new policy within the organisation (via email/presentation from HR) (June 2021).
4	2.2 Adjustment of the current coaching options/ personal development program to meet the researchers needs and expand the portfolio of professional coaches. Include surveys for monitoring	28 Career Development	M6	HR Department, Program Director, and Project Manager Education Programs, Doctoral programme management	Target: expand current coaching portfolio and reach 80% satisfaction among researchers Indicators: annual survey (in December) to collect feedback from R1-R4 researchers on quality of personal development program, coaching
5	2.3 Establishment of concrete options for researchers to participate in teaching, i.e. both in the structuring and dissemination of knowledge. The teaching offer will include activities within Wetsus Academy (MSc program) and the Honours Program Water (pre- university education).	33 Teaching	M12	Program director, HR Department, Director Wetsus academy, and Manager talent program	Target: 80% of R1-R4 researchers have some involvement in teaching activities Indicators: annual dissemination event (info day) for researchers to advertise the portfolio of teaching options, organized by HR in collaboration with managers of teaching programmes.

6	2.4 Dissemination of up-to- date complaints and	34 Complaints and Appeals	M12	HR Department, and Research	Target: improving
	appeals procedure, and the policy for scientific integrity. Both are available, but not known throughout the	апи Арреаіз		Management Team and Board of Directors	awareness on appeals procedure, policy for scientific integrity among researchers (based on results from annual survey)
	organization.				Indicators: i) Dissemination from HR of the complaints and appeals procedure and policy for scientific integrity within the organisation to create an information form; ii) Publication of the complaints and appeals procedure on the website (www.wetsus.nl/work -at-wetsus)
7	2.5 Implement a monitoring protocol on the quality of the personal development program, and satisfaction and mental health of the researchers.	28 Career Development and 33 Teaching	M12	Program director, HR Department, Executive Board, Doctoral programme management	Target: annualimprove of the qualityof the personaldevelopmentprogram, and >90%satisfaction on theimplementation ofC&C principles.Indicators: i) annualsurvey among R1-R4researchers to assesstheir view on theimplementation ofC&C principles; ii)annual meeting withsteering committeeand working group todiscuss result of the
					survey and plan correcting measures accordingly.

he OTM-R checklist showed Wetsus does not fully meet 6 of the 23 OTM-R principles. Two overlap with actions of the Gap analysis mentioned above, below it is explained how the previously defined actions ensure compliance with the OTM-R principles. For the other four, new actions are defined.

Overlapping actions

3.1 OTM-R principle 2 (*Do we have an internal guide setting out clear OTM-R procedures and practices for all types of positions?*) – Clear OTM-R procedures, in line with the European Charter and Code for Research, are currently in place for early stage reseachers, but not for more experienced researchers. An OTM-R procedure for postdoctoral positions will be established through action 1.2.

3.2 OTM-R principle 10 (*Do we have means to monitor whether the most suitable researchers apply?*) – For PhD positions, the quantity and quality of applicants is monitored through the web-based application system and evaluation forms. The dissemination of the positions is continuous improved to reach the most suitable candidates.

Wetsus will design and implement a methodology to also monitor this for other research positions.

New actions

4.1 OTM-R principle 1 (*Have we published a version of our OTM-R policy online (in the national language and in English)?)* – The OTM-R policy regarding PhD positions is well known within the organisation, and available on the website (<u>https://phdpositionswetsus.eu/recruitment-procedure</u>). This is not yet the case for other research positions. The OTM-R policy will be extended to other research positions and subsequently disseminated within the organisation and published on the website (<u>www.wetsus.nl/work-at-wetsus</u>).

4.2 OTM-R principle 4 (*Do we make (sufficient) use of e-recruitment tools?*) –Wetsus uses a custom-made web-based tool for the selection of candidates. This web-based tool was created for the recruitment of PhD researchers and currently does not apply to other research positions. Wetsus will expand the use of e-recruitment to other research positions and evaluate alternatives for the tool currently in use.

4.3 OTM-R principle 5 (*Do we have a quality control system for OTM-R in place?*) – For the OTM-R of PhD researchers such system is in place, involving performance indicators, evaluation by the different stakeholders, and the definition and implementation of continuities.

For other research positions, such quality control system is currently not in place. Wetsus will develop and implement a suitable quality control system, using the system in place for PhD researchers as starting point.

4.4 OTM-R principle 23 (*Do we have a system in place to assess whether OTM-R delivers on its objectives?*) – This principle overlaps with principles discussed earlier, for PhD positions this is in place, Wetsus will expand it to other research positions.

If your organisation already has a recruitment strategy, which implements the principles of Open, Transparent and Merit-Based Recruitment, please provide the web link where this strategy can be found on your organisation's website:

URL: <u>https://phdpositionswetsus.eu/recruitment-procedure</u>

4. IMPLEMENTATION

General overview of the expected implementation process after the award has been granted:

<u>Timeline</u>

Action 1.1 (Transparency code) (M1) Action 1.2 (Postdoctoral appointments) (M3) Action 2.1 (Working conditions) (M6) Action 2.2 (Career development) (M6) Action 2.3 (Teaching) (M12) Action 2.4 (Complains and appeals) (M12) Action 2.5 (teaching and careerdevelopment) (M9) Action 4.1 (OTM-R principle 1: publish complete OTM-R policy online) (M1) Action 4.2 (OTM-R principle 4: improve use of e-recruitment tools) (M1) Action 4.3 (OTM-R principle 5: Quality control system for OTM-R) (M6) Action 4.4 (OTM-R principle 23: monitoring system to assess OTM-R implementation) (M5)

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15
Implementing action 1.1 (Transparency code)															
Implementing action 1.2															
(Postdoctoral appointments)															
Implementing action 2.1 (Working conditions)															
→ Implementing action 2.2															
(Career development)															
→ Implementing action 2.3 (Teaching)															
→ Implementing action 2.4															
(Complains and appeals)															
Implementing action 2.5															
(Teaching and Career Development															
ightarrow Implementing action 4.1 OTM-R principle 1															
(Publishing our complete OTM-R policy online)															
Implementing action 4.2 OTM-R principle 4															
(starting to make more use of e-recruitment tools)															
Implementing action 4.3 OTM-R principle 5															
(Quality control system for OTM-R)															
ightarrow Implementing action 4.4 OTM-R principle 23															
(a system to assess whether OTM-R delivers on its objectives)															

Ganttchart

Make sure you also cover all the aspects highlighted in the checklist below, which you will need to describe in detail:

Checklist	*Detailed description and duly justification
How will the implementation committee and/or steering group regularly oversee progress?	The working group will coordinate the implementation of the action plan. The working group comprises key-persons at the different relevant departments. The HR department will support the working group by keeping track of the documents being prepared and their status.
	The working group will meet quarterly. Where executive approval is required, the working group members will put forward their proposal directly to the Executive board.
	Yearly the working group will meet with the advisory committee to present and discuss the progress, and to define and approve contingencies where needed.
	The individual working group members can schedule additional meetings as they see fit.
How do you intend to involve the research community, your main stakeholders, in the implementation process?	The working group members will use organization- wide platforms to inform all researchers at Wetsus about the implementation process, these include the organisation-magazine Wetsuits, the intranet news bulletin and the well-attended "lunch speech".
	Furthermore, the process will be presented and discussed in the "PhD meeting", where all PhD researchers are represented, and in the "TCO meeting", where all more experienced researchers are represented.
	Moreover, the research community is involved through the existing daily contacts between researchers and the HR department.
	The advisory committee, in which all stakeholder groups are represented, is another important element to ensure that the Wetsus research community is involved.

How do you proceed with the	The concrete actions described elsewhere will be
alignment of organisational policies	effective as many HRS4R principles and standards
with the HRS4R? Make sure the HRS4R	are already common-practice, and the working
is recognized in the organisation's	culture at Wetsus is consistent with the overall
research strategy, as the overarching	HRS4R purpose. An indication of this are the values
HR policy.	the Wetsus community jointly defined for
The policy.	
	themselves. These values are briefly summarized
	below to demonstrate the link with HRS4R:
	1. Innovation; searching actively for and the
	development of trendsetting technological
	innovations which are applicable to society. This
	concludes that we protect our know how with
	patents, we are supportive to new ideas, we
	stimulate each other and we are aware of
	international developments and research in our
	field.
	2. Partnership; focusing on inspiring relationships
	with our partners in order to create an effective
	network. This means that we keep our partners up
	to date, we maintain personal contact with our
	partners and we take the improvement of the
	profitability of our partners into consideration in
	our strategy and align, if possible, the business
	interests of our partners.
	3. Joy; creating a pleasant working atmosphere in
	which colleagues can grow professionally and
	personally. That means that we stimulate each
	other to maximal personal development and
	growth and we recognize special needs of every
	employee.
	4. Cooperation; supporting and respecting each
	other in an open and safe environment. That means
	that we obey safety instructions, we respect each
	other, we have personal responsibility and we
	provide each other direct feedback.
	5. Reliability; our ability to keep promises and
	providing declared standards. This means that we
	take our responsibility, we keep promises, make
	sure that expectations are communicated and we
	keep confidential information to ourselves.
	To make sure that the principles from HRS4R will
	also be implemented in the HR policy of Wetsus at
	a later phase, Wetsus will make the HRS4R
	principles the basis of the HR policy. After the

How will you ensure that the proposed actions are implemented?	implementation phase, the alignment with the HRS4R principles will be a reoccurring item in the HR and researcher meetings, so that issues are identified and addressed timely.The working group will prepare a suitable and competent team for each action. A team comprises employees involved in the subject/department of
	the action, and a member of the steering group that acts as chair. The chair will keep the other working group members informed about the progress. Prior to the formation of the teams, the working group will meet with advisory committee to obtain their advice on the composition of the teams.
How will you monitor progress (timeline)?	The progress is monitored by means of a Gantt chart including due dates, and working group and advisory board meetings. The schedule presented in the table above will form the basis of the Gantt chart. The detailed Gantt chart will be drawn up during the first Steering group meeting after the approval of the action plan and the gap analysis.
How will you measure progress (indicators) in view of the next assessment?	The progress is measured against the SMART indicators set out in the action plan. All actions have a concrete product available at the target group at a certain date as indicator. Furthermore, the gap analysis will be repeated before the end of the implementation phase to ensure full compliance with the European charter and code for Research.

Appendix 1 – Gap-analyze

The 40 principles

1. Research freedom

Definition

Researchers should focus their research for the good of mankind and for expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognized ethical principles and practices. Researchers should, however, recognize the limitations to this freedom that could arise as a result of particular research circumstances (including supervision/guidance/management) or operational constraints, e.g. for budgetary or infrastructural reasons or, especially in the industrial sector, for reasons of intellectual property protection. Such limitations should not, however, contravene recognized ethical principles and practices, to which researchers have to adhere.

Implementation

Fully implemented (++)

Explanation

All PhD and senior researchers are stimulated by supervisors and the Wetsus research management to develop freely their own research ideas. The Wetsus Intellectual Property Regulations clearly define the rules of play that exist for companies and universities connected to Wetsus and respect at the same time the research freedom that researchers need and deserve in their quest for scientific breakthroughs. Constraints to this freedom are in the definition of new research topics, which are discussed together with industrial and academic partners, to ensure both commercial relevance and scientific excellence for all the research topics. As successful example of research freedom, in the past years five Wetsus PhD alumni funded a company based on their PhD research (TailTec BV, High Voltage Water BV, Lamp-ion BV, AquaBattery BV, and AppSen BV).

Definition

2. Ethical principles

Researchers should adhere to the recognized ethical practices and fundamental ethical principles appropriate to their discipline(s) as well as to ethical standards as documented in the different national, sectoral or institutional Codes of Ethics.

Implementation

Fully implemented (++)

Explanation

Wetsus, and its Dutch university partners, follow the Dutch Code of Conduct for Scientific Practice, approved by the General Board of the Association of Universities in the Netherlands in 2004.

3. Professional responsibility

Definition

Researchers should make every effort to ensure that their research is relevant to society and does not duplicate research previously carried out elsewhere. They must avoid plagiarism of any kind and abide by the principle of intellectual property and joint data ownership in the case of research carried out in collaboration with a supervisor(s) and/or other researchers. The need to validate new observations by showing that experiments are reproducible should not be interpreted as plagiarism, if the data to be confirmed are explicitly quoted. Researchers should ensure if any aspect of their work is delegated, that the person to whom it is delegated has the competence to carry it out.

Implementation

Fully implemented (++)

Explanation

Every new research topic is carefully approved by the Wetsus program director after consultation with Wetsus senior researches, the Wetsus program council and the academic and industrial partners from the Wetsus network. Such multidisciplinary and cross-sectoral group ensures that the research is relevant to society and novel for the scientific community. Regarding the prevention of plagiarism, Wetsus works according to the Dutch Code of Conduct for Scientific Practice approved by the General Board of the Association of Universities in the Netherlands in 2004.

Definition

4. Professional attitude

Researchers should be familiar with the strategic goals governing their research environment and funding mechanisms, and should seek all necessary approvals before starting their research or accessing the resources provided. They should inform their employers, funders or supervisor when their research project is delayed, redefined or completed, or give notice if it is to be terminated earlier or suspended for whatever reason.

Implementation

Fully implemented (++)

Explanation

Wetsus is a value-based organization, pursuing core values such as Innovation, Partnership, Joy, Cooperation, and Reliability. The "vision and values" booklet, attached as appendix B, is handed to all personnel and discussed regularly: for instance at start of employment, during the annual evaluation and appraisal interviews, and during the monthly plenary lunch speech.

Especially Reliability is directly linked to the concept of professional attitude as in the European Charter for Researchers. We have defined "Reliability" as our ability to keep promises and providing declared standards, or propose an alternative to the other party as soon as possible. The value "Cooperation", instead, describe our attitude to support and respect each other in an open and safe environment, where in case of disagreement we provide feedback within 48 hours.

In addition, the organisational structure is such that researchers are given authority to manage their own research and are accountable towards their research partners and stakeholders. All Phd and Postdoc researchers are familiar with the goals, budget and legal limitations of their research projects. Regular meetings are planned with supervisors (every 1-2 weeks) to ensure enough opportunities to identify delays and find contingencies. Each researcher is furthermore embedded in a research theme. Such theme comprises multiple companies and university representatives. Three times a year, the researcher reports to, and consults with, those companies and universities. In those theme meetings, researcher are asked to be clear and realistic about their objectives, planning and results. This ensures a professional attitude from the researcher.

5. Contractual and legal obligations

Definition

Researchers at all levels must be familiar with the national, sectoral or institutional regulations governing training and/or working conditions. This includes Intellectual Property Rights regulations, and the requirements and conditions of any sponsor or funders, independently of the nature of their contract. Researchers should adhere to such regulations by delivering the required results (e.g. thesis, publications, patents, reports, new products development, etc.) as set out in the terms and conditions of the contract or equivalent document.

Implementation

Fully implemented (++)

Explanation

All researchers are familiar with contractual and legal obligations regarding working conditions, Intellectual Property Rights, and conditions related to sponsors and funders. These obligations are written down in a clean and plain manner in the so-called Research manual, attached as appendix I. The supervisors and HR are responsible to instruct newly recruited PhD students regarding such obligations. In particular, any kind of research output (publications, posters, presentations, thesis) is sent 30 days before publication for approval to the relevant parties and partners (typically, industrial stakeholders or partners in EU projects). Besides all the researchers employed by Wetsus, also BSc/MSc intern students, who work at Wetsus for short research periods (typically 4-6 moths), need to sing an internship agreement. The internship agreement is signed between Wetsus, the student and the student's university, to describe contractual obligations during the internship period, IPR of results, confidentiality, etc. The standard model agreement for interns is attached as Appendix K

6. Accountability

Definition

Researchers need to be aware that they are accountable towards their employers, funders or other related public or private bodies as well as, on more ethical grounds, towards society as a whole. In particular, researchers funded by public funds are also accountable for the efficient use of taxpayers' money. Consequently, they should adhere to the principles of sound, transparent and efficient financial management and cooperate with any authorized audits of their research, whether undertaken by their employers/funders or by ethics committees. Methods of collection and analysis, the outputs and, where applicable, details of the data should be open to internal and external scrutiny, whenever necessary and as requested by the appropriate authorities.

Implementation

Fully implemented (++)

Explanation

PhD and senior researchers at Wetsus are well aware of their accountability towards public and private funders, towards society as a whole. Public and private funders of Wetsus include the province of Friesland, the Northern Netherlands Provinces, the City of Leeuwarden, the Dutch Ministry of Economic Affair and Climate Policy, and more than 100 companies in the water sector (both large corporations and SMEs). Researchers often give presentations to these financial stakeholders. Further, the funding situation of Wetsus is from time to time on the agenda of several department meetings in Wetsus. Supervisors and the administration department of Wetsus educate the researchers on how to adhere to the requirements for proper financial management. Data handling and storage is part of the training of each new researcher.

The interaction between Wetsus and its public and private funders is ensured through formal reports, project meetings, newsletters, website and regular public events, e.g. an annual 2-day congress where all the stakeholders are invited to receive updates on Wetsus research.

Research results are published in international peer-reviewed journals with 'open access'.

Definition

7. Good practice in research

Researchers should at all times adopt safe working practices, in line with national legislation, including taking the necessary precautions for health and safety and for recovery from information technology disasters, e.g. by preparing proper back-up strategies. They should also be familiar with the current national legal requirements regarding data protection and confidentiality protection requirements, and undertake the necessary steps to fulfil them at all times.

Implementation

Fully implemented (++)

Explanation

Wetsus, and its Dutch university partners, follow the Dutch Code of Conduct for Scientific Practice, approved by the General Board of the Association of Universities in the Netherlands in 2004. Wetsus has an extensive safety policy with clearly defined regulations, control and reporting mechanisms. Safety trainings and exams are conditional to be able to work in the Wetsus laboratories.

8. Dissemination, exploitation of results

Definition

All researchers should ensure, in compliance with their contractual arrangements, that the results of their research are disseminated and exploited, e.g. communicated, transferred into other research settings or, if appropriate, commercialized. Senior researchers, in particular, are expected to take a lead in ensuring that research is fruitful and that results are either exploited commercially or made accessible to the public (or both) whenever the opportunity arises.

Implementation

Fully implemented (++)

Explanation

Contractual arrangements are in place to ensure that all research results can be published and commercialized. The Wetsus IPR regulations, attached as appendix F, apply to all parties involved in the Wetsus research. These regulations ensure that publications can only be temporary delayed for IP protection and provide the rules of play regarding the commercialization of results. Publication in international peer-reviewed journals with 'open access' is strongly encouraged and is standard practice.

Definition

9. Public engagement

Researchers should ensure that their research activities are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science. Direct engagement with the public will help researchers to better understand public interest in priorities for science and technology and also the public's concerns.

Implementation

Fully implemented (++)

Explanation

Wetsus has an active policy to stimulate communication to society, facilitated by the PR department and the Wetsus talent team. Wetsus annually organizes open days and presentations during fairs/career events. Researchers also present their research to the public. Wetsus facilitates the researchers to disseminate their research through social media¹, newsletters, and national & regional media. Furthermore, Wetsus translates its research into education tools for primary and secondary education².

10. Non discrimination

Definition

Employers and/or funders of researchers will not discriminate against researchers in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition.

Implementation

Fully implemented (++)

Explanation

Discrimination by gender, ethnicity, age, etc. is forbidden under the Dutch Act on Equal Treatment. The national Committee on Equal Treatment advices in cases of complaints based on the act. In case of conflicts at individual level within Wetsus mediation by trained Confidential Advisors is offered. In the case of unacceptable behavior by colleagues, a Confidential Advisor can be approached and a formal complaint can be made.

Definition

11. Evaluation/ appraisal systems

Employers and/or funders should introduce for all researchers, including senior researchers, evaluation/appraisal systems for assessing their professional performance on a regular basis and in a transparent manner by an independent (and, in the case of senior researchers, preferably international) committee. Such evaluation and appraisal procedures should take due account of their overall research creativity and research results, e.g. publications, patents, management of research, teaching/lecturing, supervision, mentoring, national or international collaboration, administrative duties, public awareness activities and mobility, and should be taken into consideration in the context of career progression.

Implementation

Fully implemented (++)

¹ twitter.com/wetsus

² www.wetsus.nl/education/wetsus-talent-program

Explanation

Wetsus employees have annual Performance and Appraisal Interviews with their managers based on the "Handbook for Performance Appraisal Interviews" and the "Wetsus job performance and assessment form" attached as appendixes G and H. These interviews addresses the research and other activities of the employee, the personal development/training of the employee, and feedback to the manager.

12. Recruitment

Definition

Employers and/or funders should ensure that the entry and admission standards for researchers, particularly at the beginning at their careers, are clearly specified and should also facilitate access for disadvantaged groups or for researchers returning to a research career, including teachers (of any level) returning to a research career. Employers and/or funders of researchers should adhere to the principles set out in the Code of Conduct for the Recruitment of Researchers when appointing or recruiting researchers.

Implementation

Fully implemented (++)

Explanation

Wetsus has three different recruitment facilities. For PhD's vacancies there is the WaterSEED program³, for intern students there is the Graduation & internships page⁴ at the Wetsus website and the last way is to send an open application to recruitment@wetsus.nl e-mail. WaterSEED stands for Social, Entrepreneurial and Excelling Doctors for Water technology. The objective of WaterSEED is to provide a doctoral program to excellent early stage researchers (ESRs) that want to develop their skills and contribute to the development of breakthrough technologies for water related challenges. The website concludes all the PhD positions and the complete recruitment-procedure is specified there. Candidates can find information about the requirements, selection process and deadlines. They can also find information about how to appeal if they feel they are unjustly evaluated. The project proposals for intern students are adjusted on the Wetsus website (Graduation & internships). When a student is interested they can e-mail the supervisor that provides the project. The supervisor selects the right candidates he/she wants to work with.

Open applications can be send by the recruitment@wetsus.nl e-mail. The HR-department will contact the program director and they will give an opinion whether it is a possible candidate. If so than the recruitment-procedure will start for the candidate.

Furthermore Wetsus also facilitate access for disadvantage groups at the labor market. As an example Wetsus hired a lab technician with distance to the labor market.

Definition

13. Recruitment (code)

Employers and/or funders should establish recruitment procedures which are open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised. Advertisements should give a broad description of knowledge and competencies required, and should not be so specialized as to discourage suitable applicants. Employers should include a description of the working conditions and entitlements, including career development prospects. Moreover, the time allowed between the advertisement of the vacancy or the call for applications and the deadline for reply should be realistic.

³ <u>https://phdpositionswetsus.eu/recruitment-procedure</u>

⁴ <u>https://www.wetsus.nl/graduation-internships</u>

Implementation

Fully implemented (++)

Explanation

The recruitment procedure finds place in three selection rounds and is completely described at the WaterSEED internet page⁵. The procedure is set up based on the Code of Conduct and the Charter of Codes to protect values of the charter. The working conditions and rights are declared by the collective labor agreement of the Cooperative Association of Dutch Universities (VSNU) for PhD students. Career development prospects⁶ are accommodated at 'Our offer' and there is a complete overview from the possibilities. Furter there is a complete personal development plan that Wetsus offers to their researchers. This development plan also includes training and courses.

14. Selection (code)

Definition

Selection committees should bring together diverse expertise and competences and should have an adequate gender balance and, where appropriate and feasible, include members from different sectors (public and private) and disciplines, including from other countries and with relevant experience to assess the candidate. Whenever possible, a wide range of selection practices should be used, such as external expert assessment and face-to-face interviews. Members of selection panels should be adequately trained.

Implementation

Fully implemented (++)

Explanation

In the selection process the suitability of the applicants is rated using a scoring system that will be explained in this paragraph. Underneath this paragraph there is a scheme which shows the different selection rounds. In each round, the evaluators will rate the candidate for five criteria and give scores for each criteria. The criteria and maximum scores are: Motivation (10 points), Research excellence (50 points), Enthusiasm (10 points), Initiative & independency (15 points), Communication (15 points). Candidates that score 70 points or more in the first round will be invited for a video interview (round 2). The candidates that score 80 points or more in round two will be invited for the recruitment challenge (round 3). The candidate with the highest recruitment challenge score, but with a minimum of 80 points, will be offered the PhD student position.

The composition of the selection committee depends on the selection round of the candidate. In general, the selection committee exists out a few people from Wetsus and the supervisor, and is completed by people that are independent of Wetsus. The screening finds place in the third selection round and the (external) committee exist out of one or two persons from all over Europe to give an (objective) opinion about the candidate. The procedure is described on the website. There is also a contact person linked on the WaterSEED-page to contact when the candidate wants to appeal to the decision of the selection committee.

⁵ <u>https://phdpositionswetsus.eu/recruitment-procedure</u>

⁶ https://phdpositionswetsus.eu/websites/implementatie/mediadepot/126881d3313a4.pdf

Selection rounds (scheme)

Round 1 - selection based on the required application documents

70 points or more

Round 2 - video interview

80 points or more

Round 3 - final selection during a recruitment challenge held at the premises of Wetsus in Leeuwarden

The highsted score wins (minimum of 80 points)

15. Transparency (code)

Definition

Candidates should be informed, prior to the selection, about the recruitment process and the selection criteria, the number of available positions and the career development prospects. They should also be informed after the selection process about the strengths and weaknesses of their applications.

Implementation

Almost, but not fully implemented (+/-)

Explanation

All the information about the recruitment- and selection process described by the code of conduct and Charter of code are present on the WaterSEED website. There is also information included about the personal development program. Further, the conditions and rights are defined by the collective labor agreement of the Cooperative Association of Dutch Universities (VSNU) for PhD students. Transparency is provided by the results of the scoring system that is used during the selection process. After all the rounds of the selection process has found place, the candidate gets the score of the tests he or she has been through. This will give the candidate an insight in the strong and weak points of the application. After the selection process the candidates that are in one of the lasts stage of the selection will get a call with an explanation why he/she is not hired. Furthermore the candidate can always e-mail or call for an explanation about their rejection.

16. Judging merit (code)

Definition

The selection process should take into consideration the whole range of experience of the candidates. While focusing on their overall potential as researchers, their creativity and level of independence should also be considered. This means that merit should be judged qualitatively as well as quantitatively, focusing on outstanding results within a diversified career path and not only on the number of publications. Consequently, the importance of bibliometric indices should be properly balanced within a wider range of evaluation criteria, such as teaching, supervision, teamwork, knowledge transfer, management of research and innovation and public awareness activities. For candidates from an industrial background, particular attention should be paid to any contributions to patents, development or inventions.

Implementation

Fully implemented (++)

Explanation

To take care that the merit is judged qualitatively as well as quantitatively, Wetsus set up three selection rounds. In the first round, the candidate is judge on the CV and motivation for the application at Wetsus. In the second round the supervisor will contact the candidate with a skype-interview and the last round exist out of measuring the soft skills of the candidate. In this round the candidate will be asked to; present their previous research, e.g. MSc thesis, reflect on a scientific article, one to one interview with an (external) member of the expert committee, one to one interview with the promotor/Wetsus supervisor, join a social event (e.g. a network lunch/diner or drinks with Wetsus PhD students). Besides evaluation based on Research excellence (background, grades, output), candidates are also evaluated on Motivation, enthusiasm, Initiative & independency and communication.

17. Variations in the chronological order CVs (code)

Definition

Career breaks or variations in the chronological order of CVs should not be penalized, but regarded as an evolution of a career, and consequently, as a potentially valuable contribution to the professional development of researchers towards a multidimensional career track. Candidates should therefore be allowed to submit evidence-based CVs, reflecting a representative array of achievements and qualifications appropriate to the post for which application is being made.

Implementation

Fully implemented (++)

Explanation

At Wetsus we do not discriminate based on breaks or variations in CVs. Researchers are always given the opportunity to explains possible gaps or career breaks. We are focusing on quality within our selection procedure.

Definition

18. Recognition of mobility experience (code)

Any mobility experience, e.g. a stay in another country/region or in another research setting (public or private) or a change from one discipline or sector to another, whether as part of the initial research training or at a later stage of the research career, or virtual mobility experience, should be considered as a valuable contribution to the professional development of a researcher.

Implementation

Fully implemented (++)

Explanation

In our selection any mobility experience is considered as an extra positive asset to the career and development of the researcher. Should we have questions or doubts about any mobility experience, researchers are always invited to explain their experience in a selection conversation.

19. Recognition of qualifications (code)

Definition

Employers and/or funders should provide for appropriate assessment and evaluation of the academic and professional qualifications, including nonformal qualifications, of all researchers, in particular within the context of international and professional mobility. They should inform themselves and gain a full understanding of rules, procedures and standards governing the recognition of such qualifications and, consequently, explore existing national law, conventions and specific rules on the recognition of these qualifications through all available channels.

Implementation

Almost, but not fully implemented (+/-)

Explanation

In the early stage of the selection process we look at the academic and professional qualifications. In the last stage of the selection process we also focus on the nonformal qualifications; soft skills. At Wetsus we find it important that researchers are selected on both sides of qualifications.

20. Seniority (code)

Definition

The levels of qualifications required should be in line with the needs of the position and not be set as a barrier to entry. Recognition and evaluation of qualifications should focus on judging the achievements of the person rather than his/her circumstances or the reputation of the institution where the qualifications were gained. As professional qualifications may be gained at an early stage of a long career, the pattern of lifelong professional development should also be recognized.

Implementation

Fully implemented (++)

Explanation

At Wetsus we do not handle any barriers to entry. We are not selecting on age or university. Wetsus focusses on personal achievements gained in their professional development.

21. Postdoctoral appointments (code)

Definition

Clear rules and explicit guidelines for the recruitment and appointment of postdoctoral researchers, including the maximum duration and the objectives of such appointments, should be established by the institutions appointing postdoctoral researchers. Such guidelines should take into account time spent in prior postdoctoral appointments at other institutions and take into consideration that the postdoctoral status should be transitional, with the primary purpose of providing additional professional development opportunities for a research career in the context of long-term career prospects.

Implementation

Almost, but not fully implemented (+/-)

Explanation

Wetsus established a way of handling the recruitment and appointment of Post-docs. There is however no explicit procedure or guideline for this.

22. Recognition of the profession

Definition

All researchers engaged in a research career should be recognized as professionals and be treated accordingly. This should commence at the beginning of their careers, namely at postgraduate level, and should include all levels, regardless of their classification at national level (e.g. employee, postgraduate student, doctoral candidate, postdoctoral fellow, civil servants).

Implementation

Fully implemented (++)

Explanation

At Wetsus every researcher is treated professionally and the communication usually has a nonhierarchical/flat structure. This enables the researchers to communicate with their supervisors in an open and straightforward style. PhD researchers are also given training for supervision of their students, and also receive training regarding cultural differences. Moreover, there is a training about communication styles and all these aspects play a role in enabling a professional relation between all the researchers and their professional recognition.

23. Research environment

Definition

Employers and/or funders of researchers should ensure that the most stimulating research or research-training environment is created which offers appropriate equipment, facilities and opportunities, including for remote collaboration over research networks, and that the national or sectoral regulations concerning health and safety in research are observed. Funders should ensure that adequate resources are provided in support of the agreed work program.

Implementation

Fully implemented (++)

Explanation

During working hours, the researchers have unrestricted access to the state-of-the-art research and working facilities at the WaterCampus. The offices and main laboratories are in the Wetsus building, which was built in 2014 and designed to stimulate creativity. The building is accessible for persons

with physical disabilities. Furthermore, the building offers ample of facilities for researchers, students and professionals to meet and collaborate in a formal or informal setting, face-to-face or remotely. The laboratories comprises a wide-range of research tools from across scientific disciplines, to foster multidisciplinary research and collaboration. The research facilities include an experimental hall (where large dedicated research set-ups can be build and operated) and certified microbiology, wetchemical, synthesis, and analytical laboratories (with techniques such as qPCR, FISH, UV-VIS, CLSM, EDS, AFM, OCT, SEM, Raman spectroscopy, IC, ICP, HPLC, LC/GC-MS). Moreover, state-of-the-art molecular, electrochemical, imaging and optic tools are available, while access to other specialized tools can be arranged through the participating universities. In addition, four demonstration sites are available for field experiments.

On average, for each PhD researcher a budget of 100 k€ is available for research materials, equipment and facilities. This budget guarantees the use of the most advanced analytical and experimental tools for research. In addition, a technical and analytical staff provide support to PhD researchers for setup construction and laboratory analyses. Safety and healthy working policies (at least matching national regulations) are in place and the proper implementation thereof is continuously stimulated and challenged, in order to ensure an optimal and safe working environment. The social work environment within Wetsus is supported with theme meetings, the internal congress and "borrels" (a get together after working time once in the two weeks to socialize with colleagues).

24. Working conditions

Definition

Employers and/or funders should ensure that the working conditions for researchers, including for disabled researchers, provide where appropriate the flexibility deemed essential for successful research performance in accordance with existing national legislation and with national or sectoral collective-bargaining agreements. They should aim to provide working conditions, which allow both women and men researchers to combine family and work, children and career. Particular attention should be paid, inter alia, to flexible working hours, part-time working, tele working and sabbatical leave, as well as to the necessary financial and administrative provisions governing such arrangements.

Implementation

Almost, but not fully implemented (+/-)

Explanation

Wetsus' employment policies are adhering to the Collective Labor Agreement Dutch Universities and follow i.e., flexible working hours, parental leave (for both men and women), calamity days (in case of urgent matters with family) and 35 leave days per year on a fulltime basis. The policies concerned are available in our personnel handbook and labor contracts (see appendix D). Teleworking is part of our way of working through our VPN network. Furthermore the Wetsus building is accessible for all people, because there are special adjustments for disabled people adapted in the building.

Wetsus does not have really a sabbatical regulation.

25. Stability and permanence of employment

Definition

Employers and/or funders should ensure that the performance of researchers is not undermined by instability of employment contracts, and should therefore commit themselves as far as possible to improving the stability of employment conditions for researchers, thus implementing and abiding by the principles and terms laid down in the EU Directive on Fixed-Term Work

Implementation

Fully implemented (++)

Explanation

In principle all PhD researchers at Wetsus have identical 4-year labor agreements. The terms and conditions are comparable to those of researchers who have a permanent program. For the researchers we have a personal development contract and every researcher is invited to follow this program, regardless if their contract is temporary or not.

26. Funding and salaries

Definition

Employers and/or funders of researchers should ensure that researchers enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions (including sickness and parental benefits, pension rights and unemployment benefits) in accordance with existing national legislation and with national or sectoral collective bargaining agreements. This must include researchers at all career stages including early-stage researchers, commensurate with their legal status, performance and level of qualifications and/or responsibilities.

Implementation

Fully implemented (++)

Explanation

This is guaranteed through the Collective Labor Agreement Dutch Universities⁷. Which is followed by Wetsus. Wetsus' salaries are determined by the remuneration schedules in that Collective Labor Agreement. The Collective Labor Agreement Dutch Universities is obviously governed by Dutch legislation.

27. Gender balance

Definition

Employers and/or funders should aim for a representative gender balance at all levels of staff, including at supervisory and managerial level. This should be achieved based on an equal opportunity policy at recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria. To ensure equal treatment, selection and evaluation committees should have an adequate gender balance.

Implementation

Fully implemented (++)

Explanation

As per October 2019 there are 216 employees at Wetsus. This workforce exists currently for 58% out of men and 42% of women. The gender balance in selection committees typically is a representation of the Wetsus gender balance. When hiring, gender is not an evaluation criterion; at Wetsus, candidates are selected based on their skills and not on their gender. This is also prescribed by Dutch Law in the General Equal Treatment Act (AWGB).

⁷ (https://www.caouniversiteiten.nl/wp-content/uploads/2018/11/CAO-NU-July-2017-December-2019.pdf).

28. Career development

Definition

Employers and/or funders of researchers should draw up, preferably within the framework of their human resources management, a specific career development strategy for researchers at all stages of their career, regardless of their contractual situation, including for researchers on fixed-term contracts. It should include the availability of mentors involved in providing support and guidance for the personal and professional development of researchers, thus motivating them and contributing to reducing any insecurity in their professional future. All researchers should be made familiar with such provisions and arrangements.

Implementation

Almost, but not fully implemented (+/-)

Explanation

Wetsus has created a complete 4 year plan for the personal development of PhD's (appendix E). This plan exists out of seven different courses, writing lab and intervision moments that support the five main subjects. The main subjects of the personal development plan⁸ are; self-reflection, values & incentives, autonomy, talents and connection. At the starting day of the PhD, they will set up the personal development plan and include a self-reflection. The development is measured with interview forms. The information about the personal development plan is given at the WaterSEED internet page and it is accessible for everybody. Wetsus also stimulates PhD's and staff to participate at the European WaterCampus Business Challenge and Wetsus offers a Master of Business Administration about entrepreneurship to support personal development. Furthermore, the PhD's can get a coach that helps them with their personal and professional development. In addition, staff and PhD's can also use a coach that supports them to develop themselves.

29. Value of mobility

Definition

Employers and/or funders must recognize the value of geographical, intersectoral, inter- and transdisciplinary and virtual mobility as well as mobility between the public and private sector as an important means of enhancing scientific knowledge and professional development at any stage of a researcher's career. Consequently, they should build such options into the specific career development strategy and fully value and acknowledge any mobility experience within their career progression/appraisal system. This also requires that the necessary administrative instruments be put in place to allow the portability of both grants and social security provisions, in accordance with national legislation.

Implementation

Fully implemented (++)

Explanation

Wetsus recognizes the value of geographical, intersectoral, inter- and transdisciplinary and virtual mobility. Intersectoral mobility is implemented on a daily basis. This situation is the most common in the lab, where 50 know-how disciplines and 110 companies from many sectors are involved in the joint research program. Geographical mobility is obtained by the fact that from time to time Wetsus researchers work at different laboratories in the Netherlands and in other European countries. At the same time, Wetsus regularly hosts guest researchers from foreign and national institutes. Virtual mobility is used a lot inside of Wetsus. An example of the virtual mobility that is used within Wetsus is the Skype meetings in the selection process of candidates and between PhD researchers and their supervisors at the partner universities.

⁸ https://phdpositionswetsus.eu/websites/implementatie/mediadepot/126881d3313a4.pdf

30. Access to career advice

Definition

Employers and/or funders should ensure that career advice and job placement assistance, either in the institutions concerned, or through collaboration with other structures, is offered to researchers at all stages of their careers, regardless of their contractual situation.

Implementation

Fully implemented (++)

Explanation

Wetsus has many collaborations with companies and universities from all over Europe. All researchers are in close contact with the universities and companies within their research theme. Through events we ensure that researchers not only are in contact with the companies and universities within their own research themes, but also from other research themes. All researchers are offered a training/workshop 'Career Perspectives' in their 3rd/4rd year of the research where they focus on career advice and future jobs. Next to that, Wetsus offers coaching to all employees.

31. Intellectual property rights

Definition

Employers and/or funders should ensure that researchers at all career stages reap the benefits of the exploitation (if any) of their R&D results through legal protection and, in particular, through appropriate protection of Intellectual Property Rights, including copyrights. Policies and practices should specify what rights belong to researchers and/or, where applicable, to their employers or other parties, including external commercial or industrial organizations, as possibly provided for under specific collaboration agreements or other types of agreement.

Implementation

Fully implemented (++)

Explanation

Contractual arrangements and a patent coordinator are in place to ensure commercial-relevant findings are protected for subsequent valorization; the Wetsus IPR regulations apply to all participants in the Wetsus research program and are attached as appendix F. These regulations ensure protection of know-how in order to enable patenting, and at the same time enable that all researchers findings can be published in scientific journals. The involved researchers are recognized as inventors. Wetsus facilitates its researchers to found or join (spin-off) companies for the commercial exploitation of the research. Furthermore, Wetsus co-organizes business training⁹ and match making events¹⁰ for its researchers in order to stimulate valorization by researchers.

⁹ <u>www.wetsus.nl/about-wetsus/entrepreneurship/business-educationevents</u>

¹⁰ wateralliance.nl/agenda

32. Co-authorship

Definition

Co-authorship should be viewed positively by institutions when evaluating staff, as evidence of a constructive approach to the conduct of research. Employers and/or funders should therefore develop strategies, practices and procedures to provide researchers, including those at the beginning of their research careers, with the necessary framework conditions so that they can enjoy the right to be recognized and listed and/or quoted, in the context of their actual contributions, as co-authors of papers, patents, etc., or to publish their own research results independently from their supervisor(s).

Implementation

Fully implemented (++)

Explanation

Research takes place in so-called research themes (www.wetsus.nl/research), these themes are collaborations involving multiple academic and non-academic partners. This results in highly collaborative research. It is standard practice that all persons that make a significant scientific contribution are recognized as co-author in the publications or other research output, this includes BSc and MSc students.

33. Teaching

Definition

Teaching is an essential means for the structuring and dissemination of knowledge and should therefore be considered a valuable option within the researchers' career paths. However, teaching responsibilities should not be excessive and should not prevent researchers, particularly at the beginning of their careers, from carrying out their research activities. Employers and/or funders should ensure that teaching duties are adequately remunerated and taken into account in the evaluation/appraisal systems, and that time devoted by senior members of staff to the training of early stage researchers should be counted as part of their teaching commitment. Suitable training should be provided for teaching and coaching activities as part of the professional development of researchers.

Implementation

Partially implemented (-/+)

Explanation

PhD researchers – PhD-researchers typically guide and supervise 4-6 MSc/BSc students during their 4-year research term at Wetsus. Further, they voluntarily can be involved in tutoring during Wetsus Academy MSc courses, and school projects for primary/secondary school students, in cooperation with the Wetsus Talent Program team (i.e., a team of senior scientists and educators). Other teaching duties are currently not included in the Wetsus doctoral program.

Some Wetsus PhD researchers who are also enrolled to Dutch universities may have teaching duties as part of the requirements of their graduate schools. However, such requirements are regulated by graduate schools, without any official involvement of Wetsus.

Senior researchers -- Most of the Wetsus senior researchers are involved in the training of earlystage researchers, as daily supervisors, or as organizers/trainers of specialized courses (e.g., on laboratory techniques, academic writing, etc.). Moreover, some senior researchers are also involved as lecturers at the Wetsus Academy MSc course on Water Technology.

34. Complaints/appeals

Definition

Employers and/or funders of researchers should establish, in compliance with national rules and regulations, appropriate procedures, possibly in the form of an impartial (ombudsman-type) person to deal with complaints/appeals of researchers, including those concerning conflicts between supervisor(s) and early-stage researchers. Such procedures should provide all research staff with confidential and informal assistance in resolving work-related conflicts, disputes and grievances, with the aim of promoting fair and equitable treatment within the institution and improving the overall quality of the working environment.

Implementation

Almost, but not fully implemented (+/-)

Explanation

Wetsus has several complaints procedures; there is an integrity policy and a procedure addressing Unwanted Behavior. There are two confidential Advisors, a protocol and code of conduct. In addition, several coaches are available to help with situations at work.

Wetsus is working together with an Occupational Health & Service agency; Arbodienst. This agency is helping, advising and supporting employers in regards with their ill employees in regards to stress, burnouts, and all kinds of illnesses. Arbodienst also safeguards that Wetsus follows all relevant legislation. The agency can also intervene with psychologists, social workers and/or a confidential advisor. Our scientific integrity policy (a.o. to prevent fraud or plagiarism) is currently (October 2019) under completion. Regarding the prevention of plagiarism, Wetsus works according to the Dutch Code of Conduct for Scientific Practice approved by the General Board of the Association of Universities in the Netherlands in 2004.

35. Participation in decision-making bodies

Definition

Employers and/or funders of researchers should recognize it as wholly legitimate, and indeed desirable, that researchers be represented in the relevant information, consultation and decision-making bodies of the institutions for which they work, to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution.

Implementation

Fully implemented (++)

Explanation

Wetsus has a PhD candidate representatives committee, which discusses 4 times per year with the board of directors in order to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution. Further the representatives committee also chair the meeting of all researchers, where they discuss the collective needs, observations and advices.

36. Relation with supervisors

Definition

Researchers in their training phase should establish a structured and regular relationship with their supervisor(s) and faculty/departmental representative(s) so as to take full advantage of their relationship with them. This includes keeping records of all work progress and research findings, obtaining feedback by means of reports and seminars, applying such feedback and working in accordance with agreed schedules, milestones, deliverables and/or research outputs.

Implementation

Fully implemented (++)

Explanation

PhD researchers -- Every PhD researcher makes a project plan along with his/her supervisor at a very early stage, and this plan is assessed and changed as the project moves along. The PhDs have weekly meeting with their Wetsus supervisors and together they plan for monthly/bimonthly meetings with their promotors. There are also theme meetings 3 times a year where they present/discuss their results to all the parties involved in their research theme, and this also involves their Wetsus supervisors and promotors. Whenever required, discussions by video calls also are arranged. Every year there is also an annual evaluation of the project together with the supervisors and promotors.

Senior researchers and staff -- The senior researchers and staff have their respective supervisors with whom they can discuss their duties and progress. The overall structure at Wetsus is non-hierarchical and encourages an open discussion between all the employees.

37. Supervision and managerial duties

Definition

Senior researchers should devote particular attention to their multi-faceted role as supervisors, mentors, career advisors, leaders, project coordinators, managers or science communicators. They should perform these tasks to the highest professional standards. With regard to their role as supervisors or mentors of researchers, senior researchers should build up a constructive and positive relationship with the early-stage researchers, in order to set the conditions for efficient transfer of knowledge and for the further successful development of the researchers' careers.

Implementation

Fully implemented (++)

Explanation

PhD researchers -- Every PhD is assigned a Wetsus supervisor (who is the daily supervisor) and a promotor who is affiliated with a university. Both supervisors are involved in making the project plans and are in constant touch with the progress and evaluation of the PhDs project. The relation between the PhDs and their supervisors is non-hierarchical enabling easy communication throughout the project. Feedback from supervisors to researchers and vice-versa is encouraged.

Senior researchers and staff – Personal development of staff members (a.o. by courses, intervision and coaching) is stimulated. The senior researchers and staff have, on a regular basis, evaluations with their respective supervisors (including a performance appraisal). These evaluations focus on improving the quality of the work (including supervision) by touching on the strength of the employees and how they can be best deployed.

38. Continuing Professional Development

Definition

Researchers at all career stages should seek to continually improve themselves by regularly updating and expanding their skills and competencies. This may be achieved by a variety of means including, but not restricted to, formal training, workshops, conferences and e-learning.

Implementation

Fully implemented (++)

Explanation

PhD researchers -- PhD researchers enroll into a personal development program as soon as they start. This program focuses on several skills that will help them throughout their project. Apart from that, the PhDs participate in workshops, attend conferences, and other networking events that will be useful for them during their project and beyond.

Senior researchers and staff -- The senior researchers and staff are also involved in various courses that are included as per the necessity of their function. For instance, all the employees at Wetsus follow a course about communication styles, which helps in understanding the different communication perspectives involved in a multicultural organization. Also, all the employees follow a talents course, which helps them identify their talents and deploy them in their job. Besides that, the employees have the option to participate in specific personal development courses as per their needs. (Please also see the explanation of principle 37).

39. Access to research training and continuous development

Definition

Employers and/or funders should ensure that all researchers at any stage of their career, regardless of their contractual situation, are given the opportunity for professional development and for improving their employability through access to measures for the continuing development of skills and competencies. Such measures should be regularly assessed for their accessibility, take up and effectiveness in improving competencies, skills and employability.

Implementation

Fully implemented (++)

Explanation

PhD researchers -- The training given through the personal development program aims to develop soft skills that will be helpful beyond the project. Moreover, additional training regarding research skills, for instance regarding a specific instrument is provided whenever it is required for that project. Moreover, there is a course on career development toward the end of their project, which gives them skills for improving their employability.

Senior researchers and staff -- All employees from Wetsus follow courses related to their personal development plan. This can be a general course that is applicable to all the employees or can be courses specific to their function or discipline. In such a case, they communicate this with their supervisor who facilitates the suggestion of a suitable course.

40. Supervision

Definition

Employers and/or funders should ensure that a person is clearly identified to whom early-stage researchers can refer for the performance of their professional duties, and should inform the researchers accordingly. Such arrangements should clearly define that the proposed supervisors are sufficiently expert in supervising research, have the time, knowledge, experience, expertise and commitment to be able to offer the research trainee appropriate support and provide for the necessary progress and review procedures, as well as the necessary feedback mechanisms.

Implementation

Fully implemented (++)

Explanation

PhD researchers -- The PhDs are assigned their Wetsus (/daily) supervisors and university promotors at the beginning of the project. They are thus clearly aware of whom to approach for feedback/suggestions. These supervisors have relevant academic or industrial relevance in their project and are well qualified for their supervision task. There are several checkpoints (like theme meetings, annual review system) to monitor the progress and cooperation between supervisor and researcher.

Senior researchers and staff -- The senior researchers and staff have their designated and qualified supervisors with whom they can discuss their progress and have their performance appraisal. The performance appraisal facilitates a dialogue between the employee and their supervisor and aims to improve the quality of the work. This includes looking at the past experiences and also planning for the future.

Appendix 2 – OTM-R Checklist

OTM-R Checklist

A specific self-assessment checklist is provided for Open, Transparent and Merit-Based Recruitment (OTM-R). Please report on the status of achievement, also detail on the indicators and the form of measurement used.

OTM-R checklist for organisations							
	Open	Trans- parent	Merit- based	Answer: ++ Yes, completely +/-Yes, substantially -/+ Yes, partially No	*Suggested indicators (or form of measurement)		
OTM-R system							
1. Have we published a version of our OTM-R policy online (in the national language and in English)?	x	x	x	+/- Yes, substaintially	https://phdpositionswetsus.eu/waterseed We publish our OTM-R policy only in English, because we are an international organisation. And this policy is set up for PhD positions, not for non- PhD positions. So Wetsus should also create a OTM-R policy for non-PhD positions.		
2. Do we have an internal guide setting out clear OTM-R procedures and practices for all types of positions?	x	x	x	- No	[Date of latest update; ensure that it is sent to all staff] For ESR positions, all our staff follow the policy that is published on our website.		
3. Is everyone involved in the process sufficiently trained in the area of OTM-R?	x	x	x	++ Yes, completely	 Existence of training programs for OTM-R Wetsus does not have a specific training program for OTM-R. Our HR-department provides a clear explanation about our OTM-R policy for staff that is involved with recruitment. We also have employees that are experienced in OTM-R, these employees provide coaching to less experienced employees within Wetsus. The explanation is based on the score form we use to assess the candidate. The score form is attached as Appendix A. Number of staff following training in OTM-R There is not a number of staff following the training, because we don't have a special training 		

					in OTM-R. All the staff members that are involved in recruitment receives the information that is provided by HR.
4. Do we make (sufficient) use of e-recruitment tools?	x	x		+/-Yes, substantially	Web-based tool for (all) the stages in the recruitment process We only use a web-based tool for the first step of the application. The first step of the application is applying for a position. The researchers can apply by following the steps that are explained at the job advertisement. In the second application round we use video-interviews as a e-tool to do job interviews. The next steps of the application are provided by our intern network.
5. Do we have a quality control system for OTM-R in place?	x	x	x	/+ Yes, partially	Wetsus does not have a quality control system for all our OTM-R. Regards to ESR the recruitment is part of a MSCA COFUND project that is periodically reviewed by evaluators appointed by the EC. Furthermore we have external experts overseeing the recruitment and we have a Program Director that meets all 3 rd round applicants to ensure consistency. We also have an appeal procedure.
6. Does our current OTM-R policy encourage external candidates to apply?	x	x	x	++ Yes, completely	Trend in the share of applicants from outside the organization The share of applicants from outside the organization is 90%. The other 10% exist out of candidates from the Wetsus Academy and intern students So 10% percent of the candidates are applying from within Wetsus.
7. Is our current OTM-R policy in line with policies to attract researchers from abroad?	x	x	x	++ Yes, completely	Trend in the share of applicants from abroad Wetsus is an international organization and we publish our positions only on international job advertisement webpages.

8. Is our current OTM-R policy in line with policies to attract underrepresented groups?	x	X	x	++ Yes, completely	Trend in the share of applicants among underrepresented groups (frequently women) Our current gender distribution is divided into 60% men and 40% women. And Wetsus doesn't make distinction based on gender. In Holland it is prohibited to distinguish between men and women during the selection process according to the Act. This is only permitted if the organization has urgent reasons for this. Furthermore we try to keep the balance between man and woman in the organization.
9. Is our current OTM-R policy in line with policies to provide attractive working conditions for researchers?	x	X	x	++ Yes, completely	Trend in the share of applicants from outside the organization Wetsus bases its policies on the collective labor agreement of universities. Furthermore Wetsus also follows the principals of the Charter and Code provided by Euraxess.
10. Do we have means to monitor whether the most suitable researchers apply?				+/-Yes, substantially	Our evaluation/assessment forms monitor the suitability of researchers, but this is only standardized for PhDs.
Advertising and application phase					
11. Do we have clear guidelines or templates (e.g., EURAXESS) for advertising positions?	x	x		++ Yes, completely	We use the templates provided by the job advertisement organization who publishes our positions. And furthermore we have our own template for the WaterSeed page.
12. Do we include in the job advertisement references/links to all the elements foreseen in the relevant section of the toolkit?	x	x		++ Yes, completely	In our job advertisement we publish all the relevant information for the position. And we add references/links to all the elements that belong to the project.
13. Do we make full use of EURAXESS to ensure our research vacancies reach a wider audience?	x	x		++ Yes, completely	 The share of job adverts posted on EURAXESS; All our job adverts are posted on Euraxess. Trend in the share of applicants recruited from outside the organisation/abroad We do keep track in general where our online traffic comes from for our website. This shows

					through which job portals the viewers come from and also from which country.
14. Do we make use of other job advertising tools?	x	x		++ Yes, completely	We use different online job advertising organizations like Research gate, WaterSeed, Euraxess and etc. Furthermore we also check if there are other online organization that are relevant to post the position.
15. Do we keep the administrative burden to a minimum for the candidate?	x			++ Yes, completely	Candidates can declare all their expenses at Wetsus.
Selection and evaluation phase					
16. Do we have clear rules governing the appointment of selection committees?		x	x	++ Yes, completely	Statistics on the composition of panels Wetsus has three selection rounds during the selection process and with every round there is a new group of people involved. in the first round, it is checked whether the candidate has submitted all the documents for the application and whether the motivation for the position meets our expectations. It is also examined whether the candidate's career matches the project. For the first round of the selection Wetsus has an independent selection committee that exists out of a few members from the scientific staff. The members of the scientific staff have knowledge and affinity with the project, but they are not directly involved with the project. The second selection round exists out of an skype-interview with Wetsus supervisor and the promoter. The selection committee for the last round exists out of the Wetsus supervisor, the promotor, the expert committee and the Program director from Wetsus. The expert committee are one or two persons that are not close attached to the project and can ensure objectivity during the selection.

17. Do we have clear rules concerning the composition of selection committees?	x	x	++ Yes, completely	Written guidelines There are three selection committees. The first committee exists out of independent committee with a few member from the scientific staff. These members have affinity and knowledge of the project, but they are not directly involved with the project. The next selection committee exists out of the Wetsus supervisor and the promoter from the project. The third selection committee exists out of the Wetsus supervisor, the promotor, the expert committee and the Program director from Wetsus. The expert committee are one or two persons that are not close attached to the project and can ensure objectivity during the selection.
18. Are the committees sufficiently gender- balanced?	x	x	++ Yes, completely	This depends on the project. But we always try to take care that there is a good balance between men and women in the selection committee.
19. Do we have clear guidelines for selection committees which help to judge 'merit' in a way that leads to the best candidate being selected?		x	++ Yes, completely	Written guidelines are attached at Appendix A During the selection process we use a score form with all our candidates where they can score points in different disciplines. Furthermore we also take care that the university are playing a clear role during the selection process and together with the Wetsus supervisor they fill in the score form The promoter from the university is an objective part during the selection process and focuses on the interests of the candidate instead of the interests of Wetsus. The university and Wetsus both have an proportional voice in the selection process.
Appointment phase				
20. Do we inform all applicants at the end of the selection process?	x		++ Yes, completely	The candidates receive an e-mail with the points they received during the recruitment process that are filled in at the score form. And they receive an explanation why the recruitment process stops for them.

21. Do we provide adequate feedback to interviewees?	x	++ Yes, completely	The candidates receive feedback directly after the interviews. And they also receive a complete feedback by e-mail, based on the score form.
22. Do we have an appropriate complaints mechanism in place?	x	++ Yes, completely	Statistics on complaints Wetsus has an e-mail account were candidates can send their appeals and complains to. Our appeal committee will handle the appeal within two months. Appeals can be sent to appeals_phdpositions@wetsus.eu
Overall assessment			
23. Do we have a system in place to assess whether OTM-R delivers on its objectives?		+/- Yes substaintally	On this criteria Wetsus scores sufficiently, because we have an assessment for Phd's, but not for non- PhD's. For WaterSEED, we make an evaluation report after the conclusion of every PhD call. This evaluation includes information on the number of positions fulfilled, the different nationalities of the recruited candidates (showing how far we have reached out), the number of male and female researchers that have been employed, and also what are the contingency plans for fulfilling the remaining positions.

Appendix A – Score form Recruitment

Score form

Research project number:

Title research project:

Name candidate:

Criteria (max score)	Round 1 (documents)	Round 2 (video interview)	Round 3 (recruitment challenge)
Motivation (10)			
Research excellence (50)			
Enthusiasm (10)			
Initiative & Independency (15)			
Communication (15)			
Total score (100)			
Name Evaluator			
Date evaluation			

Optional remarks: