



HR EXCELLENCE IN RESEARCH

HR Excellence in Research

Gdynia Maritime University



(Photo. T. Degórski, GMU)

December 2017

Contents:

1. Introduction
 - a. Basic information about the University
 - b. International cooperation
 - c. Participation of the University in international programmes, projects, scientific research initiatives
 - d. Most important scientific research achievements
2. Methodology
 - a. Progress of work
 - b. Information campaign
3. Internal analysis
 - a. Internal analysis of documentation
 - b. Report on research
 - c. Gap analysis and OTM-R
4. Action plan
 - a. Organisational information
 - b. Planned actions
 - c. Monitoring the implementation of actions

1. INTRODUCTION

a. Basic information about the University

Gdynia Maritime University (GMU) is the biggest public maritime University in Poland and one of the biggest in Europe, educating future officers of the merchant fleet as well as engineering and managerial staff for the maritime economy and the sea region on the bachelor, engineer, master and doctor level. The University also offers complementary education for officers and experts of the maritime economy. Moreover, it makes it possible to acquire knowledge within full-time and part-time studies, post-diploma studies and within specialist or qualification courses. The offer of fields and specialisations is vast and constitutes a response to the needs of the current job market. Beyond any doubt, the biggest advantage of the University is that it educates students both in marine and land faculties, fields and specialisations.

The rich history of Gdynia Maritime University began with the Resolution of 17 June 1920 signed by General Józef Leśniewski establishing the Maritime School. The organisers of the first Polish Maritime School strongly believed that education of future officers of the merchant fleet had to be realised mainly during seagoing trainings. Therefore, it was necessary to acquire appropriate vessels for the School. The Polish flag was first hoisted on the School's training vessel named "Lwów" on 4 September 1921 and then the School inaugurated its activities in two faculties: the Faculty of Navigation and the Faculty of Marine Engineering.

In 1930 a decision was made to move the School from Tczew to Gdynia. In the academic year 1930/1931 the long serving "Lwów" was replaced by another training vessel, the tall ship "Dar Pomorza". In 1938 the Faculty of Maritime Transport and Administration was established. Gradually new faculties and specialisations were added, so at the end of the 60s the Faculty of Navigation, the Faculty of Marine Engineering and the Faculty of Business Administration were already in the School's organisational structure.

In 1958 the State Maritime School became a post-secondary technical college, and ten years later, it merged with the State Deep Sea Fishing School. Finally, in 1968 it was restructured into Gdynia Maritime Academy (Polish: Wyższa Szkoła Morska). At that time the Academy had capacity to offer studies at four faculties and in sixteen specialisations. Two brand new training ships started operation: in 1982 the beautiful tall ship "Dar Młodzieży" and in 2000 the modern training research ship "Horyzont II".

On 5 December 2001, on the basis of the decision of the Parliament of the Republic of Poland, Gdynia Maritime Academy (Polish: Wyższa Szkoła Morska) was restructured into Gdynia Maritime University (Polish: Akademia Morska).

At present Gdynia Maritime University has 4 dynamically developing faculties: Electrical Engineering, Marine Engineering, Navigation and Entrepreneurship and Quality Science, within which the University is expanding its scientific-didactic activities in 7 fields of studies and 30 specialisations. All the four faculties are authorised to award doctoral degrees. Moreover, the Faculty of Electrical Engineering and the Faculty of Entrepreneurship and Quality Science are authorised to award post-doctoral degrees. On 30 September 2017 the total number of full-time and part-time students was: 5521. Education of students is realised by comprehensively educated staff of researchers, who guarantee the highest didactic level.

The structure of employment of scientific-didactic staff:

Number of full professors – 25

Number of doctors with habilitation – 49

Number of doctors – 146

Number of masters – 109

Total: 329

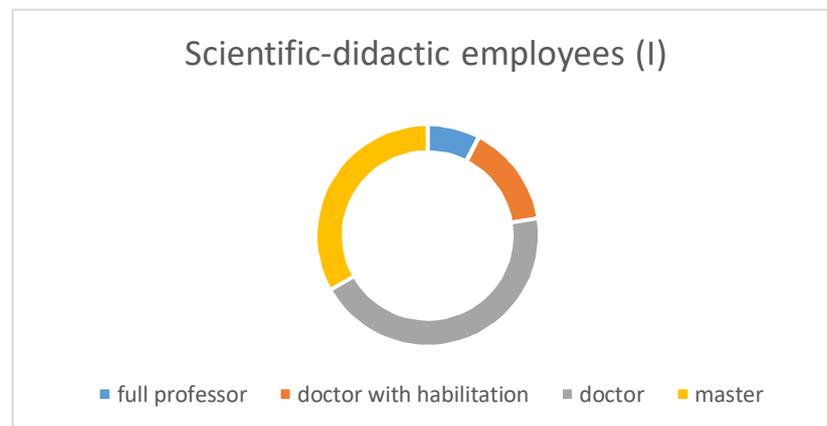


Fig. 1. Structure of employment of scientific-didactic employees in GMU by academic degrees.

Including:

Number of full professors - 25

Number of associate professors – 50

Number of assistant professors with habilitation – 3

Number of assistant professors with PhD – 88

Number of research-and-teaching assistants – 64

Number of senior lecturers (PhD) – 52

Number of senior lecturers (masters) – 33

Number of lecturers – 11

Number of instructors – 3

Total: 329

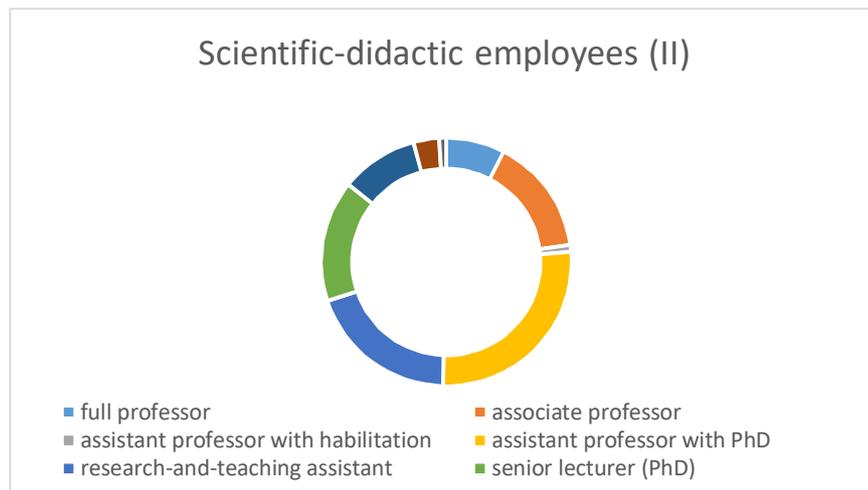


Fig. 2. Structure of employment of scientific-didactic employees in GMU by positions.

The actions undertaken and future development of Gdynia Maritime University were outlined in the adopted Development Strategy for Gdynia Maritime University for the years 2016-2020, which is in line with the assumptions of the maritime policy of the Republic of Poland up to the year 2020 (with the prospect up to 2030), which is determined and described by the Integrated Policy of the European Union and the Ministerial Programme for the Development of Higher Education and Science for the Years 2015-2030. It is consistent with the University mission, according to which by conducting scientific research Gdynia Maritime University significantly enhances knowledge related to development and operation of technical systems in the maritime economy, and by educating students it prepares staff on the highest level, who are able to handle effectively challenges of the present maritime economy, especially maritime transport on the national and international level. In order to satisfy the economic needs of the country and the region, the University shapes among its students attitudes that are characterised by entrepreneurship and respect for the principles of sustainable development. Gdynia Maritime University plays an advisory and opinion-creating role with regard to the issues relating to the maritime economy and education of staff for its needs. The fundamental values of Gdynia Maritime University are: truth and reliability in science and education, close integration of an educational process with the needs of economic surroundings, innovativeness and openness.

The strategy of Gdynia Maritime University is consistent with the priorities of the Europe 2020 Strategy and the Long-term Strategy for the Country Development (Poland), as well as with the Regional Development Strategy of the Voivodeship of Pomorskie until 2020.

The University cooperates with external stakeholders within, among others, formulation of educational programmes or R & D projects. Thanks to the cooperation with socio-economic surroundings the University realises a series of research and development projects, in which its partners are entrepreneurs <http://am.gdynia.pl/oferta-dla-biznesu>. The external stakeholders of GMU are such companies as:

<http://am.gdynia.pl/node/4166>

Furthermore, in order to establish good practices and to maximise the use of the European Union resources the University cooperates with the National and

Regional Contact Point and with the Office of Pomorskie Region in Brussels. Assistance of the Office is essential in realising research and development projects, in which the partners are foreign external institutions, and in disseminating information among researchers on the international level (the network ERRIN Blue Growth).

Gdynia Maritime University cooperates also within actions related to the agreement of Smart Specialisations for Pomerania, the Polish Maritime Cluster (<http://klastermorski.com.pl/>), the Cluster INNOeCAR (<http://innoecar.pl/>) and on the international level with Academia Europa Nostra (<http://www.academiaeuropanostra.eu/index.php?ids=start&lang=en>)

b. International Cooperation

Gdynia Maritime University cooperates with foreign partners on the basis of bilateral agreements, intergovernmental agreements and international joint projects.

Among foreign partners GMU has had especially close and long-lasting contacts with the following higher education institutions: Hochschule Bremerhaven (HB) since 1978 and Shanghai Maritime University (SMU) since 1984.

Hochschule Bremerhaven and Gdynia Maritime University organise the exchange of groups of staff, which results in presentation of a series of lectures for students, and also participation in joint workshops and seminars. Since 1985 "Joint Proceedings Hochschule Bremerhaven - Akademia Morska w Gdyni" have been published, in which representatives of both higher education institutions present their scientific achievements. Students of both the institutions participate in scientific seminars "Managing Cultural Diversity in Europe" organised annually in Bremerhaven and Gdynia.

During the I Poland-China Regional Forum organised by Gdańsk University, GMU and Shanghai Maritime University were honoured with the award "Best Practice" for the best example of long-lasting Polish-Chinese cooperation. The basis for this cooperation are: the bilateral agreement between SMU and GMU on scientific-didactic cooperation dated 1984 and the Agreement on Scientific-Technical Cooperation between the government of the Republic of Poland and the government of the People's Republic of China dated 1995. The cooperation between both the universities is based on the exchange of "visiting professors", scientific supervision of doctoral students, exchange of students, joint participation in prestigious international conferences (IMECE, IEEE, IMEKO), joint publications in the journals of both the Universities ("Journal of Shanghai Maritime University", "Joint Proceedings of GMU") and in the recognised worldwide periodicals, such as "Automation of Electric Power Systems" or "Polish Maritime Research", and "Measurement" from the Philadelphia List.

The most important in the scientific international cooperation between GMU and SMU is partnership within international scientific projects (Sino-Polish Joint Research Projects) in priority areas in science and technology in both the countries, focusing mainly "on the sea". They are also partners in the area of international research and work for international maritime organisations: cooperation on the forum of the International Maritime Organization IMO, on the forum of the International Association of Maritime Universities IAMU, joint projects under the auspices of the Nippon Foundation.

Other partners of GMU within bilateral agreements are among others: Kaliningrad State Technical University (Russia), Fachhochschule Giessen-Friedberg (Germany), Hochschule Wismar (Germany), Escola Náutica Infante D.

Henrique (Portugal), "Gheorghe Asachi" Technical University of Iasi (Romania), "Vasile Alecsandri" University of Bacau (Romania), Katolícka Univerzita v Ružomberku (Slovakia), University of Rijeka – Faculty of Maritime and Transport Studies (Croatia), Kyiv National University of Trade and Economics (Ukraine), Lviv Polytechnic National University (Ukraine), Ternopil National Economic University (Ukraine), Australian Maritime College (Australia), Vietnam Maritime University (Vietnam), Batumi Maritime Academy (Georgia), Tokyo University of Marine Science and Technology (Japan), Admiral Ushakov State Maritime University (Russia) and Istanbul Technical University (Turkey).

Angola Project

Gdynia Maritime University, on the basis of the agreements of cooperation with Navimor International Com (NICOM), is the main partner responsible for the scientific-didactic side of the project "The construction and establishment of the Academy of Fishery and Marine Sciences in Namibe, in the Republic of Angola". The Academy of Fishery and Marine Sciences in Namibe (Academia de Pescas e Ciências do Mar do Namibe), is the public higher education institution of pan-African character and technical profile, which educates engineers for fishery and the merchant fleet as well as for the sector of fish processing, water resources investigations and maritime administration.

During the first stage of the project (2008–2010) researchers from GMU developed the organisational concept and operation plans for the Academy - the didactic and scientific part and they also prepared the overall plans and teaching curricula - the "know-how" of constructing a maritime university. The second stage (2013–2018) involves research and development works of engineering-technical and expert-consulting character as well as didactic cooperation within education of future staff on II- and III-cycle studies in GMU for the newly constructed Academy in Namibe.

The tasks realised by GMU included:

- technical consultancy and consultations relating to design and completion of laboratory equipment and related software,
- development of the concept, principles of operation and realisation of technical equipment for the Training Centre of Maritime Rescue and Firefighting,
- elaboration and publishing in the Portuguese language the unique, pilot series of 28 academic course books dedicated for the needs of the Academy of Fishery and Marine Sciences in Namibe, Angola,
- realisation of the original, pilot educational curriculum to educate 20 students on the master and doctoral studies in specialisations ordered by the Ministry of Fishery of Angola. 19 Angolan students completed II-cycle studies and returned to Angola with the degree of Master. Currently 1 student continues doctoral studies in Gdynia Maritime University in the Faculty of Marine Electrical Engineering.

Some of the Angolans educated in Gdynia are now didactic staff of the Academy of Fishery and Marine Sciences in Namibe.

The ANGOLA Project, due to its scale and innovativeness, was recognized and Gdynia Maritime University received two awards : "Innovative Economy 2016" (Maritime Economy Forum, Gdynia 2016) and "Polish Intelligent Development Award 2016" (Smart Development Forum, Rzeszów 2016).

Accomplishment of the realised tasks by GMU gained recognition and positive perception from Navimor International Com, which resulted in obtaining the order for technical elaborations, expertises, curricula and academic course

books, in line with the agreement. On the “macro” level, confirmation of achieving the projected targets is the fact that on 18th May 2016 the President of Angola, Jose Eduardo Santos signed the Decree No 63/16, enabling construction of the Academy of Fishery and Marine Sciences in Namibe, as a higher education institution related to fishery, of public-private character under joint supervision of the Ministry of Higher Education and the Ministry of Fishery of the Republic of Angola. The official ceremony of the inauguration of the Academy was held on 17th July 2017.

The Angola Project is the biggest European project conducted on the continent of Africa.



Photo 1. Academy of Fisheries and Marine Sciences in Namibe (photo: Navimor International).

Algeria Project

Gdynia Maritime University and the Officer Training Centre of Gdynia Maritime University Ltd. realised within the agreement with the shipyard Remontowa Shipbuilding S.A. a task of training the Algerian crew for the sailing frigate “El Mellah” of the Algerian National Navy, which was launched in 2015 in the shipyard Remontowa Shipbuilding S.A. On 21 October 2017 the marine military forces of Algeria officially took control of the frigate El Mellah. The complete, original system for crew training and operation of the sailing vessel was developed by the team under supervision of Captain Henryk Śniegocki. After a six-month training under the guidance of GMU staff, which included: theoretical courses, practical training in the harbour and during training races (first aboard s/v “Dar Młodzieży”, and later aboard the new Algerian frigate), the Algerian crew is ready to take the frigate “El Mellah” to the home port in Algeria.



Photo 2. Sailing ship El-Mellah (photo C. Spigarski, Oficyna Morska).

International Organisations

IMO and IMSO

International Maritime Organization (IMO) is the United Nations ONZ agency handling maritime affairs, especially the safety and security of shipping and the prevention of marine pollution by ships. The main task of IMO is to create effective, universally adopted and implemented regulatory framework for the widely understood shipping industry. On the other hand, the International Mobile Satellite Organization IMSO is the inter-governmental organisation, whose primary purpose is the oversight of certain public satellite safety and security communication services provided by mobile satellite communication. IMSO also acts as the international LRIT coordinator (Long Range Identification and Tracking of Ships), appointed by IMO to ensure operation of the international system for the Long Range Identification and Tracking of Ships (LRIT) worldwide by auditing and reviewing performance of the system. GMU experts undertake actions on the IMO forum for the government of the Republic of Poland by participating in sessions of the Marine Environment Protection Committee (MEPC), the Sub-Committee on Navigation, Communications and Search and Rescue (NCSR), the Sub-Committee on Carriage of Cargoes and Containers (CCC) and the Sub-Committee on Human Element, Training and Watchkeeping (HTW) as well as in sessions of the International Mobile Satellite Organization (IMSO) for safety of shipping, radiocommunications, and search and rescue (SAR). Experts prepare analyses of cases that are discussed in sessions of the organs of IMO and IMSO and elaborate the expert opinion of the Polish side with conclusions resulting from the resolutions adopted by IMO and IMSO. Participation of GMU experts in the works of the structures of IMO and IMSO contributes to development of professional competences and enhancement of the didactic process in maritime universities worldwide.

IAMU

Gdynia Maritime University is a member of the International Association of Maritime Universities (IAMU) – the global network of the leading maritime universities that provide education and training for seafarers in worldwide shipping. IAMU is an international non-governmental organisation representing the maritime academic community, which has the status of an advisory organisation accredited to IMO. At present IAMU boasts more than 60 leading maritime institutions and the non-profit organisation, the Nippon Foundation, which supports IAMU actions by granting research scholarships. The Annual General Assembly (AGA) is the main IAMU forum enabling exchange of information and approval of the strategy of the Association as well as promotion of good relationships and cooperation among its members. Gdynia Maritime University has belonged to IAMU since 2000 and at present is a member of the International Executive Board IEB of IAMU and the Academic Affairs Committee, which is its part.

IEEE

The Institute of Electrical and Electronics Engineers is the biggest professional technical organisation worldwide dedicated to development of new technologies. The main aim of the organisation is to promote technological innovations and advancement for the benefit of mankind. IEEE, through scientific-didactic actions of its members, scientific publications frequently

cited, technological standards and scientific conferences, provides inspiration for the world community to develop innovations, especially in the area of electrical engineering, electronics, telecommunications, computer and information engineering, and related areas.

In 2016 on the basis of the decision of the Committee of IEEE Member and Geographic Activities, the Polish Chapter of IEEE Systems, Man, and Cybernetics Society, was formed with representatives of the Department of Information Systems of GMU in its structures. On the other hand, among the authorities of the Polish Chapter of IEEE Electron Devices are representatives of the Department of Marine Electronics. In the previous years the representative of the Department of Ship Automation in GMU belonged to the authorities of the Polish Chapter of IEEE Instrumentation and Measurement Society.

Representatives of Gdynia Maritime University also participate in cyclical scientific conferences organised by IEEE.

Mobility of scientific-didactic employees

Representatives of GMU delivered lectures as “visiting professors” in Shanghai Maritime University (China) and Universite de Cergy-Pontoise (France); they also did scientific internships in the University of Warwick (Great Britain), Université de Lyon (France), Hochschule Bremerhaven (Germany), the University of Oldenburg (Germany) and Aalto University (Finland).

Gdynia Maritime University welcomed “visiting professors” with didactic classes for GMU students, among others from: Latvian Maritime Academy (Latvia), Constanta Maritime University (Romania), University of Dubrovnik (Croatia), "Lviv Polytechnic" National University (Ukraine), Ternopil National Economic University (Ukraine), Belarusian State University of Informatics and Radioelectronics (Belarus), Hochschule Wismar – University of Applied Sciences, Business and Design (Germany), University “St. Klement Ohridski”, Faculty of Technical Sciences, Department of Traffic and Transport (Macedonia), Admiral Makarov State University of Maritime and Inland Shipping (Russia).

The representative from the Faculty of Navigation participated as a member of the jury and the Reviewer in the presentation of a doctoral dissertation in Instituto Superior Tecnico in the University of Lisbon.

The representative of GMU, who is also the representative of the International Association of Institutes of Navigation IAIN, participates in the meetings of the International Committee on GNSS operating within the United Nations Office for Outer Space Affairs (UNOOSA), and also takes part in the sittings of the Resilient Navigation and Timing Foundation Advisory Council, and the European Global Navigation Satellite Systems Agency. The subjects of meetings are issues relating to modernisation of GPS, international cooperation and further development plans within GNSS and a proposal to construct the eLoran system in Poland.

The scientific-didactic employees of Gdynia Maritime University did international scholarships and research internships:

- 1) Dr Mariola Jastrzębska (engineer) from the Faculty of Entrepreneurship and Quality Science within the European Union project "Copyright Management – the key to success in relations of science and business" did an internship in the International Institute for Product and Services Innovation in the University of Warwick in England. The aim of the internship was enhancement of knowledge and exchange of practical experience on scientific research and technology transfer.

- 2) In the years 2014-2016 in the Faculty of Marine Engineering the UE project FP7-PEOPLE-2013-IRSES-612593 was conducted. The project concerned transfer of knowledge among various scientific centres. Employees of the Faculty of Marine Engineering did scholarships in A. V. Luikov Heat and Mass Transfer Institute of the National Academy of Sciences of Belarus. The visit of GMU employees in Belarus and the return visit of scientists from the Academy in the Faculty of Marine Engineering facilitated transfer of knowledge in the areas of: measurements techniques for micro and nano technology, technology of thin hard coating of metal alloys, hydrodynamic theory of lubrication and technology of nano tubes production. Altogether 10 scientific-didactic employees of GMU were participants of the internship in the National Academy of Sciences of Belarus.

Foreign students in GMU

Over the last four years the number of foreign students realising in GMU a full cycle of studies in the Polish language and Erasmus students has doubled, which is illustrated in the below figure.

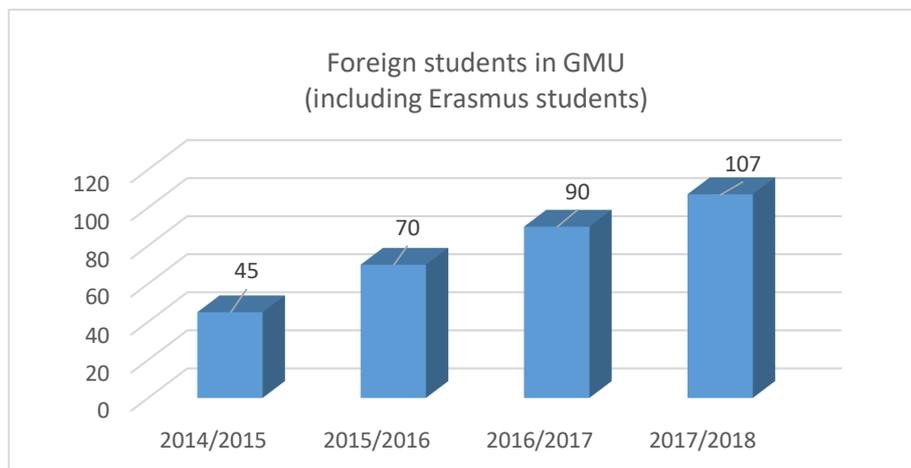


Fig. 3. Number of foreign students at GMU in 2014/15-2017/18.

Erasmus Programme

Gdynia Maritime University has been participating in the Erasmus Programme since the very beginning of its existence in Poland, that is since 1998.

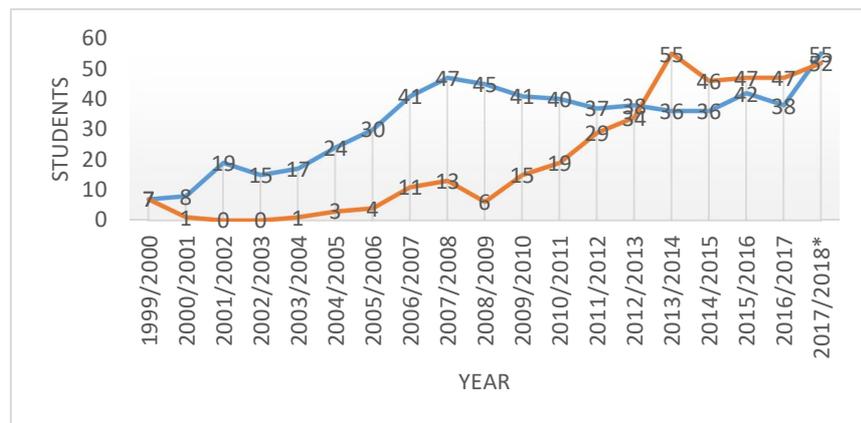
Its aim is to support the countries participating in the programme in their efforts for effective use of human potential and social capital of Europe. The principle of long life learning is implemented by combining support for formal, beyond formal and informal learning in the area of education, training and sport. The programme also aims at increasing possibilities of collaboration and mobility of the partner countries, first of all in the field of higher education and youth.

Gdynia Maritime University offers its students an opportunity to go abroad and study for some time in one of 41 partner universities in 17 countries of the European Union, and to go abroad to do internships. For GMU employees there is an opportunity to go abroad and conduct didactic classes or do vocational trainings. For all mobility participants there is a support of the Mentor Programme.

Since 2015 students participating in the exchange can also use a new tool provided to enhance foreign language competence. Within the system OLS (Online Linguistic Support) it is possible to access tests checking the level of language competence and also do intensive language courses online.

Moreover, there is a special offer for disabled participants and people in a difficult financial situation – they can be supported financially during the Erasmus programme by the Operational Programme Knowledge, Education and Development.

The systematically increasing number of students of the partner universities realising a part of their studies within the Erasmus Programme in GMU is a clear sign of the increasing scale of internationalisation of GMU.



Erasmus Programme – students mobility

— Outgoing students
 — Incoming students

Fig. 4. Number of Erasmus students program in the years 1999/00 - 2017/18.

Offer of studies realised in the English language

There are plans to offer studies realised in the English language in all four faculties of the University in the next years. The offer will concern the following disciplines:

Table 1. Study programs in English delivered by GMU faculties.

| Faculty | Field | Specialisation |
|---|---|--|
| Faculty of Marine Engineering | Mechanical Engineering and Machine Design | Marine Propulsion Plant and Offshore Construction Operation (B.Eng.) |
| Faculty of Marine Electrical Engineering | Electrotechnical Officer | Marine Electro-Automation (MSc) |
| Faculty of Entrepreneurship and Quality Science | Innovative Economy | Maritime Economics & Logistics (BSc) International Trade, Transport & Logistics (MSc) |
| Faculty of Navigation | Navigation | Sea Transport (B.Eng.) |

Gdynia Maritime University meets the world's requirements for merchant fleet officers education, which are in compliance with the International Convention on Standards of Training, Certification and Watchkeeping (STCW). This document prescribes international standards and procedures relating to training, certification and watchkeeping. The present form of the Convention has been binding since 1997 and since that year enterprises and institutions, operation of which is connected with international shipping, have been obliged to meet its provisions concerning seafarers' training and simultaneously the controlling organs, which were established to pursue this aim, including Polish maritime universities and offices have been obliged to execute these provisions. Consequently, all the fields in GMU offer studies in line with the requirements of the Convention.

c. Participation of the University in international programmes, projects, scientific research initiatives

Gdynia Maritime University, as a scientific centre, conducts research as well as expert and training activities within research and transfer of technology designed for companies and economic organisations. The conducted research focuses on development of the economy in many areas in line with numerous priority trends in research within regional Smart Specialisations and National Smart Specialisations. The national and international scientific research projects conducted in GMU are closely connected with trends in development and the needs of the region, the country and the international market.

Gdynia Maritime University has noted remarkable achievements in international cooperation over the last years in the area of scientific research projects:

- 1) Within bilateral cooperation under the Agreement of Scientific and Technical Cooperation between the Government of the Republic of Poland and the Government of the People's Republic of China, Gdynia Maritime University conducted the following research projects jointly with Shanghai Maritime University:
 - a) Study of the existing and design of new thods for electrical power quality improvement in river ships with electric propulsion.
 - b) Study on new technology development for power quality assessment on shipboard.
 - c) Study of power quality on shipboard for improvement of China Classification Society rules.
 - d) Analysis and study of operational active filters for ship applications.
- 2) Within the European Social Fund's Program for Collaboration and Innovation Development, Tallinn University of Technology and Gdynia Maritime University conducted works "Doctoral School of Energy and Geotechnology II" conducted under the bilateral agreement.
- 3) Within the agreement of scientific cooperation between the Polish Academy of Sciences and the Estonian Academy of Sciences, the Department of electrical drives and power electronics (ESTONIA), the following projects were conducted:

- a) Smart Power Electronics arrangements and control methods for active power distribution grids.
- b) Integration of renewable energy sources and improvement of energy conversion efficiency in microgrids.
- 4) Within the IAMU Research Project FY 2012, Gdynia Maritime University in cooperation with the International Association of Maritime Universities (IAMU) and Odessa National Maritime Academy (ONMA) conducted the project: "IAMU MODEL COURSE FOR ELECTRO-TECHNICAL OFFICERS (ETO)".
- 5) Within grant competitions for international research projects:
 - a) JOHANN – Joint Development of Small Cruise Ship tourism heritage products in the Southern Baltic Sea Region – the project conducted within the cooperation: the Interreg South Baltic Programme for 2014 – 2020.
 - b) Small and medium-sized ports collaboration for efficient supply chains – (SMPorts), the draft project within seed money for the Interreg Baltic Sea Region Programme.
 - c) Holistic Management of Maritime Transportation based on integrated Safety and Environmental Indicators – the draft project within seed money for the Interreg Baltic Sea Region Programme.
 - d) SAT-AIS-PL Phase A, the project conducted with the European Space Agency funds.
 - e) Small and medium-sized Baltic Sea ports development challenges, the international project conducted within the CBSS Project Support Facility.
 - f) A pan-European framework for strengthening critical infrastructure resilience to climate change (EU-CIRCLE), the project conducted within the programme Horizon 2020.
 - g) Assessing the potential of future maritime applications in the context of VDE (VHF Data Exchange System (JERICHO-VDE), the project realised with the European Space Agency funds.
 - h) POL SAT-AIS, the project realised with the European Space Agency funds.
 - i) Towards Intelligent Micro-Bearings – Tribological Aspects (IMBeing), the project conducted within the 7th Framework Programme for Research and Technological Development (EU), People - Marie Curie (IRSES).
 - j) StarDust - The Strategic Project on Trans-national Commercial Activities in Research & Innovation, Cluster and in SME-Networks, the project conducted within the Baltic Sea Region Programme 2007-2013.
 - k) SAFEPOR – The support system for port entry and mooring of ships as an element of intelligent transport system (ERA_NET_MARTEC).
 - l) Analysis and study of operational active filters for ship applications.
 - m) EfficienSea - Efficient, Safe and Sustainable Traffic at Sea, the project funded within the Transnational Cooperation Programme of the Baltic Sea Region Programme 2007-2013.
 - n) Safety and reliability of complex industrial systems and processes.
 - o) Maritime Transport Coordination Platform (acronym: MTCP), the project conducted within the 6th Framework Programme for Research and Technological Development (EU).

- p) Safety and Reliability of Industrial Systems and Structures. (acronym: SAFEREL), the project conducted within the 5th Framework Programme for Research and Technological Development (EU).
- q) Thematic Network on Maritime Education, Training and Mobility of Seafarers (acronym: METNET), the project conducted within the 5th Framework Programme for Research and Technological Development (EU).

Gdynia Maritime University realises also a series of national projects related to fundamental research, infrastructure research, research and development, educational research and research connected with enhancement of scientific-didactic employees' competences. In total, over the last 10 years 72 projects have been conducted of the total value about 25 million EUR.

Projects conducted from 2007 to 2017

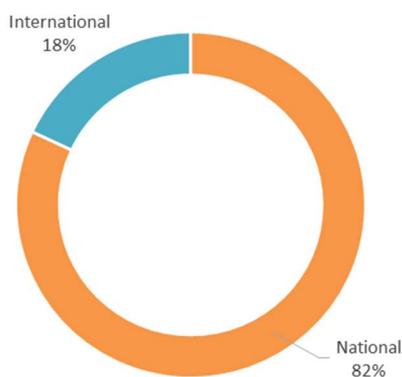


Fig. 5. The share of projects financed from national and international sources in the total number of projects implemented with the participation of Gdynia Maritime University in 2007-2016.

Projects conducted from 2007 to 2017

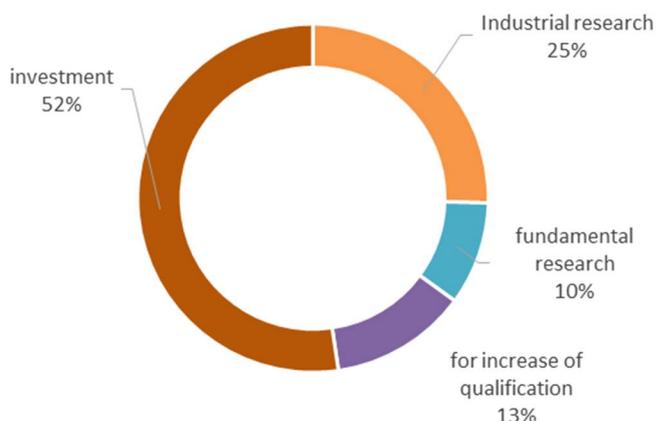


Fig. 6. Share of the value of different types of projects in the total value of projects carried out at Gdynia Maritime University in 2007-2016.

Projects conducted from 2007 to 2017

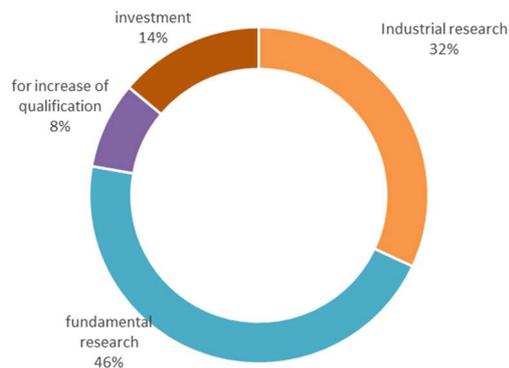


Fig. 7. Participation of various types of projects in the number of all projects carried out at Gdynia Maritime University in 2007-2016.

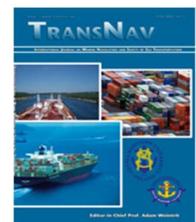
d. Most important scientific research achievements

1) Gdynia Maritime University publishes four scientific journals that are on the list of Impact factor scientific journals of the Ministry of Science and Higher education:

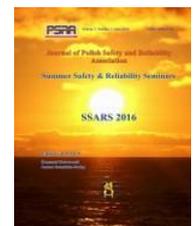
a) Scientific Journal of Gdynia Maritime University – ISSN 1644-1818 - cyclically published proceedings that are a set of reviewed articles of scientific character on issues relating to the sea and the widely understood maritime economy. SJ GMU (ZN AMG) is an interdisciplinary periodical issued continuously for more than 40 years, which presents the original results of empirical and theoretical research. There is also a special issue of this periodical “SJ GMU Joint Proceedings” presenting scientific publications that are a result of the cooperation with Hochschule Bremerhaven. <http://zeszytyamg.am.gdynia.pl/>



b) TransNav - the International Journal on Marine Navigation and Safety of Sea Transportation – ISSN 2083-6473 – a quarterly addressed to scientists and practitioners in the disciplines of: automation and robotics, geodesy and cartography, science of safety, telecommunications and transport. <http://www.transnav.eu/>



c) Journal of Polish Safety and Reliability Association – ISSN 2084-5316 - a journal issued once or twice a year. It features original and reviewed articles, which constitute a response to the latest challenges in the area of safety and reliability, presenting the ways to ensure safety and reliability analyses of complex systems and processes. <http://jpsra.am.gdynia.pl/>



- d) Works of the Faculty of Navigation – ISSN 1730-1114 – a yearbook characterised by a wide range of subjects, starting from the widely understood problems of navigation through problems of ship operation and their manoeuvrability, specific problems of nautical meteorology and oceanography to elements of maritime law and ports operation.
<http://wn.am.gdynia.pl/pw/>



- 2) Within the project “The construction and establishment of the Academy of Fishery and Marine Sciences in Namibe, in the Republic of Angola”, realised jointly with Navimor International Com (NICOM), Gdynia Maritime University developed the full concept of the Academy operation and curricula, which will be used for students in the Academy in Namibe. Gdynia Maritime University developed also methods and procedures that constitute the “know-how” for this newly constructed pan-African maritime educational institution. Within the project the unique set of 28 course books (published in the Portuguese language) was elaborated for the needs of the new Academy.
<http://rzecz.pl/afrykanskie-wybrzeze-pod-polska-bandera/>

Due to the scale, innovativeness and publications’ impact factor Gdynia Maritime University was rewarded with three prestigious awards:

- a) INNOVATIVE ECONOMY 2016 (INNOWACYJNA GOSPODARKA 2016)
<http://www.am.gdynia.pl/aktualnosci/2016/akademia-morska-w-gdyni-nagrodzona-za-innowacyjne-przedswiezecie-project-angola>



Fig. 8. The "Innovative Economy" award.

- b) POLISH INTELLIGENT DEVELOPMENT AWARD 2016
(POLSKA NAGRODA INTELIGENTNEGO ROZWOJU 2016)
<http://www.am.gdynia.pl/aktualnosci/2016/GMU-zakwalifikowana-do-polskiej-nagrody-inteligentnego-rozwoju-2016-za-project>.



Fig. 9. The nomination letter for the prize.

- c) ELSEVIER Research Impact Leaders Award – Engineering and Technology



Fig. 10. Diploma to the prize

- 3) Gdynia Maritime University ceaselessly aims to modernise and upgrade its scientific research didactic laboratories. For this purpose it is undertaking efforts to obtain funds from various external sources in order to purchase and modify scientific research or didactic equipment. The University has twice obtained funds from the European Union financial resources to realise the above mentioned aims:
- Since 2016 Gdynia Maritime University has been conducting the project “Expansion of Didactic Infrastructure assisting practical education in the Faculty of: Marine Engineering, Marine Electrical Engineering and Navigation in GMU – a purchase of didactic laboratory equipment” (“Infrastruktura dydaktyczna wspierająca kształcenie praktyczne na Wydziałach Mechanicznym, Elektrycznym i Nawigacyjnym w Akademii Morskiej w Gdyni - zakup wyposażenia laboratoriów dydaktycznych (iMEN)”). The total value of the project – more than 12.000.000 PLN.
 - In the years 2014-2015 within the Infrastructure and Environment Operational Programme 2007-2013 (“Program Operacyjny Infrastruktura i Środowisko 2007-2013”), the project: “Expansion of Didactic Infrastructure” was realised (acronym: RIDAM) (“Rozbudowa Infrastruktury Dydaktycznej Gdynia Maritime University”). The total value of the project – more than 31.000.000 PLN.
- 4) On the basis of the agreement signed on 17 May 2016, Gdynia Maritime University started cooperation with Rolls-Royce Poland Sp. z o.o. The results of this cooperation are actions relating to the didactic process as well as applied, industrial and developmental scientific research.
- 5) Gdynia Maritime University conducts numerous projects and research works on the national level as well as projects internationally recognised:
- a) Within the European Fund for Regional Development, GMU conducts 2 research and development projects funded by the European Union financial resources:
 - The project co-realised with Enamor sp. z o.o. “Construction of the prototype of the system for monitoring shore load and seabed strengthening in ships mooring areas with the market launch of the ready product by Enamor sp. zo.o. in Gdynia” (“Stworzenie prototypu systemu monitorowania obciążeń nadbrzeży i umocnień dna w rejonie cumowania statków implementation wraz z wdrożeniem na rynek gotowego produktu przez firmą Enamor sp. zo.o. in Gdynia”),
 - The project co-realised as partnership: “Research, development of the project and construction of the innovative prototype of a pushed set: a pusher of hybrid drive with an innovative boat of variable draught using fuel cells as the power supply source; an innovative pushed barge for transporting heavy and bulky goods with the anti-tilt system in horizontal loading of a Ro-Ro with the thruster (dimensions adapted for the Przegalina Sluice). (“Badania, opracowanie projektu i budowa prototypowego innowacyjnego zestawu pchanego: pchacza o napędzie hybrydowym wraz z innowacyjną łodzią towarzyszącą o zmiennym zanurzeniu z wykorzystaniem ogniw paliwowych jako źródła zasilania, innowacyjnej barki pchanej do przewozu ładunków ciężkich i wielkogabarytowych z systemem antyprzechyłowym do operacji poziomego ładowania Ro-Ro ze sterem strumieniowym (o wymiarach dostosowanych do śluży w Przegalinie) ”. The leader of the project is Marine Projects Ltd. Sp. z o.o.

- b) GMU is one of the 20 partners conducting the international project of the acronym EU-CIRCLE: "A pan-European framework for strengthening critical infrastructure resilience to climate change". This project is funded with the European Union financial resources within the programme HORIZON 2020.
 - c) Within the programme: "The European Space Agency's Polish Industry Incentive Scheme (PLIIS)" Gdynia Maritime University together with 6 partners as a consortium (National Institute of Telecommunications, Gdynia Maritime University and Space Research Centre – the Polish Academy of Sciences) conducts the project "SAT-AIS PL Phase A". The aim of the project SAT-AIS-PL is development, construction and launch of the Polish satellite on the Earth's orbit; the satellite will be equipped with the AIS system, the terrestrial station of telemetry, tracking and control of the satellite and an interface facilitating distribution of the data obtained by the satellite to be used for identification of end users.
 - d) Gdynia Maritime University benefited also from the programme "DIAMOND GRANT". The University obtained funds from the Ministry of Science and Education to conduct two projects within the programme for outstanding young scientists:
 - Modelling the course of the base line of the territorial sea with the use of an unmanned hydrographical unit (drone) and active geodesy networks GNSS on the example of sea basins of the Republic of Poland.
 - Modelling electrical and thermal properties of IGBTs and of power modules with these transistors.
- 6) Within cooperation with economic surroundings, Gdynia Maritime University conducts research and development works concerning development of pro ecological technologies. The results of these works are:
- a) the first Polish electric sports car SMOK – components used to build this car were designed and manufactured by the employees of the Faculty of Marine Electrical Engineering in GMU. They include: a trajectory synchronous motor, an inverter, the batteries package managing system, a vehicle on-board computer with auxiliary systems, the air-conditioning and cooling system, the support system for the brake system, the system of temperature conditioning for the battery package;
<http://ev.am.gdynia.pl/>
 - b) the motorcycle with the electric powertrain – during the conducted works the construction of a motorcycle was developed with elements covering the power system, but effectively influencing its cooling (only with air). The following were designed and manufactured by the employees of the Faculty of Marine Electrical Engineering in GMU: a trajectory synchronous motor, the batteries package managing system and a dedicated on-board computer of the motorcycle.
 - c) the boat with the electric powertrain – the compact electric powertrain was designed and realised for a boat. The employees of the Faculty of Marine Electrical Engineering developed on the basis of the conducted research: the transmission system, the main electric powertrain, the batteries package managing system, the system for automated drying of the boat and a dedicated on-board computer of the boat.

- 7) The Polish Accreditation Committee, as a result of the institutional assessment carried out in the Faculty of Entrepreneurship and Quality Science in Gdynia Maritime University, expressed its opinion that the integration of the Internal System to Ensure Quality and the System of Management Control with the System of Quality Management in Gdynia Maritime University is an exceptional solution, so far unheard of, in the sector of higher education institutions in Poland. The Internal System to Ensure Quality, according to the Committee, is consistent, fully developed and in line with the present factual and legal requirements and it takes into account specificity of the University. The aspect that deserved special attention, as there is a lack of common practices in other higher education institutions within this area, was systematic assessment of effectiveness of this system and the use of its results to improve the University policy of ensuring quality as well as building up the culture of quality education.



Photo 3. Dar Młodzieży (photo: T. Degórski, GMU)

- 8) A lot of scientific research is also conducted aboard the training vessels – “Dar Młodzieży” and “Horyzont II”. Research works are realised not only by GMU employees, but in cooperation with other research centres, e.g. the Institute of Geophysics, Polish Academy of Sciences, the Institute of Oceanology, Polish Academy of Sciences, the Institute of Communications of the Maritime Office in Gdynia, or Wrocław University of Environmental and Life Sciences. The investigations were also conducted on the “Dar Młodzieży” by students from the Scientific Circle of Ship Engineers “SEANOVATION”. The issues investigated are not only: operation of ship engines, measurements of electrical energy characteristics or of generators characteristics, but they also relate to measurements works on oceanic seismic stations on the Greenland Sea, investigations of the radio field range within the project “The Internet on the Baltic Sea”, tests of prototype diagnostic software for the main ship engine,

investigations of data transmission range in water and deploying ARGO floats from the vessel.



Photo 4. Horyzont II (photo: T. Degórski, GMU)

Patents

As a result of the conducted scientific research, GMU has obtained in recent years 37 intellectual property protection rights for its inventions and 1 for the utility model.

One of the inventions was patented as a consequence of the cooperation of the representatives of GMU and Shanghai Maritime University (China). The Patent Protection for the invention – “Low voltage DC busbar ground insulation resistance measurement device”, the authors of which are: Gu Wei, Wang Rundong, Mindykowski Janusz, Xu Xiaoyan and Hu ang Xixia, is for 20 years.

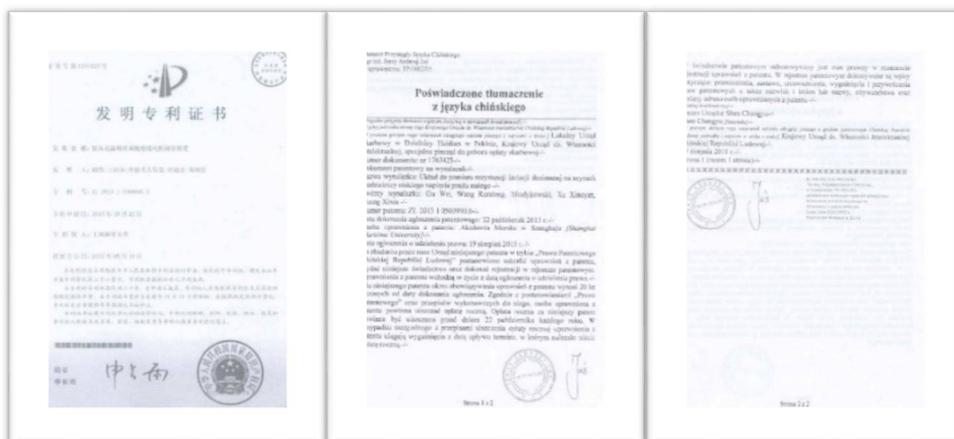


Fig. 11. Patent protection "A system for measuring the earth insulation resistance on the low switchgear bus bars DC voltage".

Organisation of scientific conferences

Over the last decade Gdynia Maritime University has organised and co-organised 48 international scientific congresses, conferences and symposia. Scientific conferences constitute a forum, on which recognised researchers and experts in all the scientific disciplines have an opportunity to disseminate the results of their scientific research and the latest achievements as well as to exchange opinions and expert knowledge. At the same time, it is the essential platform for networking, starting scientific cooperation and planning future joint research.

Rankings

Gdynia Maritime University due to its profile connected with education and scientific works on the issues of the maritime economy, holds the fourth position in the Ranking Web of Universities among higher education universities of the maritime profile.

<http://www.webometrics.info/en/search/Rankings/maritime>

2. METHODOLOGY

a. Progress of work

The Development Strategy for Gdynia Maritime University for the years 2016-2020 adopted by the authorities established the University's priorities: consolidation of efforts to strengthen the position of the University as the leading international academic centre in education and scientific research for the needs of the maritime economy and increasing contribution of the University in knowledge transfer to the economy, creation of innovative solutions and commercialisation of research results.

One of the pillars supporting development of the University in the area of scientific research is to provide good and stable working conditions for researchers at all stages of their career path.

The principles and requirements of the European Charter for Researchers and the Code of Conduct in the Recruitment of Researchers were recognised by the University authorities as the basis to initiate works on enhancement of the principles relating to recruitment and working conditions of researchers.

In October 2016, on the initiative of the Vice Rector for Research and International Cooperation, the first meeting of representatives of all the faculties and GMU administration was held to undertake works leading to the University's application for an award HR Excellence in Research logo. On the Ordinance of the Rector of GMU the HR Team was formally appointed in December 2016. The HR Team, apart from the above mentioned representatives of particular faculties, consists of: the legal counsel, the organisational expert, the information security expert and the representative of GMU doctoral students. Simultaneously, the Rector obliged all the employees of the University to actively engage in the works on development of the HR Strategy for Researchers.

The meetings of the HR Team were held regularly to maintain fast progress and simultaneously to observe changes introduced by the University authorities since 2016 related to working conditions for researchers in GMU. Special attention was paid to opinions of the group of representatives of doctoral students expressed during seminar-consultations, conducted also as workshops. The formulated opinions and proposals for improvement/enhancement were included in the prepared gap analysis. The analysed issues were also consulted with the authorities of particular faculties, the Chancellor, the Chief Financial Officer, the Manager of Human Resources and Payments Department and the Organisational-Legal Department.



Fig. 12. Letter of Commitment and Endorsement

b. Information campaign

The next action undertaken by the HR Team was to create the website, which presented the information on the Charter, the Code and the present works of the Team.

<http://www.am.gdynia.pl/logo-hr-excellence-research-0>
<http://www.am.gdynia.pl/en/node/29>



Fig. 13. Website presenting the issues Logo HR Excellence in Research.

On 26 June 2017 a series of seminars were conducted in particular faculties of GMU, in which the HR Strategy for Researchers and the actions undertaken by the HR Team were presented.



Photo 5. Faculty of Marine Electrical Engineering Seminar (photo: I. Dudek-Muczyńska, GMU)



Photo 6. Faculty of Marine Engineering Seminar (photo: I. Dudek-Muczyńska, GMU)

3. INTERNAL ANALYSIS

a. Internal analysis of documentation

The works of the HR Team started from the analysis of legal documents regulating operation of GMU – the internal, national and international documents. Some of the internal regulations were changed already in the process of analysis.

The list of the analysed legal documents included:

- The Act of 27 July 2005. Law on Higher Education, Journal of Laws of 2016, item 1842, as amended;
- The Act of 14 March 2003. Law on Academic Degrees and Title and Degrees and Title in the Arts, Journal of Laws of 2017, item 1789, as amended;
- The Act of 30 April 2010 on the Principles of Financing Science, Journal of Laws of 2016, item 2045, as amended;
- The Public Finance Act of 27 September 2009, Journal of Laws of 2017, item 2077, as amended;
- The Act of 17 December 2004 on the Liability for the Breach of Public Finance Discipline, Journal of Laws of 2017, item 1311, as amended;
- The Act of 30 April 2010 on the National Science Centre, Journal of Laws of 2016, item 1071, as amended;
- The Act of 30 April 2010 on the National Centre for Research and Development, Journal of Laws of 2017, item 1447, as amended;
- The Act of 30 June 2000 on Industrial Property Law, Journal of Laws of 2017, item 776, as amended;

- The Act of 27 July 2001 on Copyrights and Related Rights, Journal of Laws of 2017, item 776, as amended;
- The Act of 26 June 2006 on the Protection of Databases, Journal of Laws of 2001, item 128.1402, as amended;
- The Act of 26 June 1974 - Labour Code, Journal of Laws of 2016, item 1666, as amended;
- The Act of 23 April 1964 The Civil Code, Journal of Laws of 2017, item 459, as amended;
- The Act of 14 June 1960 Code of Administrative Procedure, Journal of Laws of 2017, item 1257, as amended;
- The Act of 29 January 2004 - Public Procurement Law, Journal of Laws of 2017, item 1579, as amended;
- The Regulation of the Ministry of Science and Higher Education of 11 December 2013 on the conditions for the remuneration and eligibility for other work-related benefits of employees of a public higher education institution, Journal of Laws of 2016, item 2063 of 19 December 2016, as amended;
- The Regulation of the Ministry of Science and Higher Education of 11 September 2015 r on the method of determining the subsidy amount and settling the funds to maintain research capacity as well as for scientific research and development activities and tasks related to them, aiding development of young scientists and doctoral students, Journal of Laws of 2015, item 1443 of 22 September 2015, as amended;
- The Resolution No 20/2016 of the Council of the National Centre of Science of 3 March 2016, on adopting the rules of integrity in scientific research, Journal of Laws of 2016, item 1071 of 21 July 2016, as amended;
- The Code of the National Science Centre on Research Integrity and Applying for Research Financing, 3 March 2016;
- Good academic practices in recruitment and in supervisor-subordinate relationships, the Ministry of Science and Higher Education, 2014
- The Code of Ethics for Researchers of 2012 (adopted with the Resolution 10/2012 by the General Assembly of the Polish Academy of Sciences of 13 December 2012);
- Reliability in scientific research and respect for intellectual property, Ministry of Science and Higher Education, 2012;
- The Statute of GMU adopted with the Resolution No 12 of the Senate of Gdynia Maritime University of 2 March 2006;
- The Development Strategy for Gdynia Maritime University for the years 2016-2020;
- Quality Policy;
- Good practices in Gdynia Maritime University of 27 June 2013;
- The Regulations on scientific research works and Statutory Activity grants (further on: DS) allocated to the basic organisational units of GMU within grants to maintain research potential of 23 January 2013;
- The Regulations on Remuneration for employees of Gdynia Maritime University, excluding crew members of the training vessels of 13 June 2017;

- The Regulations on subsidising participation of academic teachers and doctoral students of Gdynia Maritime University in scientific conferences of 21 December 2016;
- The Regulations on the use of research infrastructure in Gdynia Maritime University of 26 March 2015 (the Resolution of the Senate of GMU No 253/XV);
- The Regulations on managing copyrights and related right, industrial property rights and commercialisation of research results in Gdynia Maritime University of 26 March 2015;
- The Regulations on the University Computer Network of GMU of 12 December 2006 (as amended in the Resolution No 10 of 26 January 2010 and in the Resolution No 9 of 31 March 2014 - consolidated text);
- The resolution No 9 of 31 March 2014 on amendments in the Regulations on the University Computer Network of Gdynia Maritime University;
- The Resolution No 5 of 6 February 2017 on collection, documentation, elaboration and dissemination of publishing achievements of employees, doctoral students and students of Gdynia Maritime University;
- The Resolution No 4 of 6 February 2017 on the University Repository of Scientific Achievements of academic teachers, doctoral students and students of Gdynia Maritime University (SED);
- The Resolution No 49 of 12 November 2012 on announcements of job vacancies in Gdynia Maritime University (amendments in the Resolution No 11 of 20 August 2015);
- The Resolution No 11 of 20 August 2015 on amendments in the resolution on announcements of job vacancies in Gdynia Maritime University;
- The Resolution No 3 of 21 April 2008 on application for and realisation of projects funded with international and national resources;
- The Ordinance of the Rector of GMU of 31 March 2017 on rotation procedures for academic teachers that have not obtained the scientific degree of a doctor with habilitation by the statutory defined date;
- The Resolution No 27 of the Rector of GMU of 17 December 2015 on the novelty in the Policy of Information Security and Data Protection in Gdynia Maritime University;
- Convention STCW - International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978.

b. Report on research

In order to achieve the most objective view of recruitment processes and researchers' work in GMU, the survey was developed and carried out among scientific research employees in the period from 15 January to 15 February 2017. 195 respondents participated in the survey, which accounts for 59% of the total number of GMU staff. Men constituted 64%, and women - 36%.

With regard to the positions held, respondents represented the following groups: 51 professors, 67 doctors, 45 research-and-teaching assistants and 32 lecturers and senior lecturers.

The responses were aggregated and the following results of the survey were obtained:

Questions in the survey were divided into four groups corresponding to the issues indicated in the application procedure for a logo HR Excellence in Research award. The survey results will be discussed in the same order in the further parts of the report.

Part I. Ethic and professional aspects

This part of the report contains the survey results aggregated on the basis of the questions relating to ethical and professional aspects. The results are presented in Figures 14-22.

Fig. 14. Opinions of GMU employees on performance of scientific research

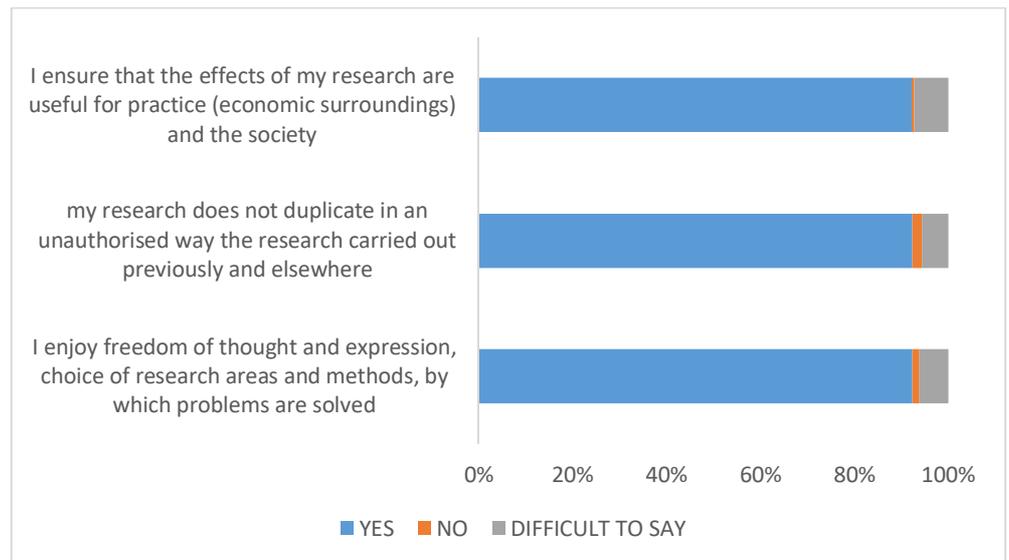


Fig. 15. Researchers' familiarity with the principles of funding scientific research in GMU

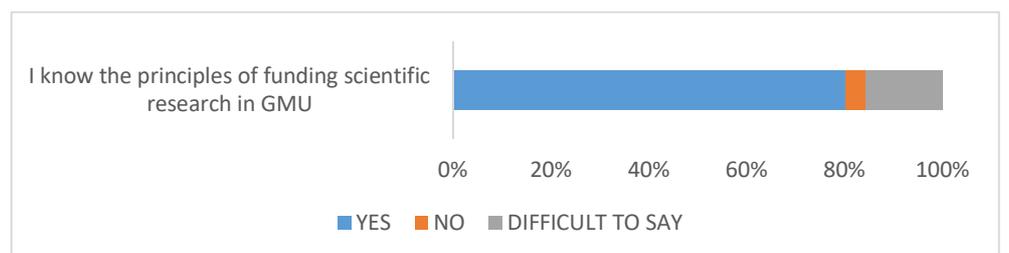


Fig. 16. Adherence to the principles of ethics and intellectual property in GMU

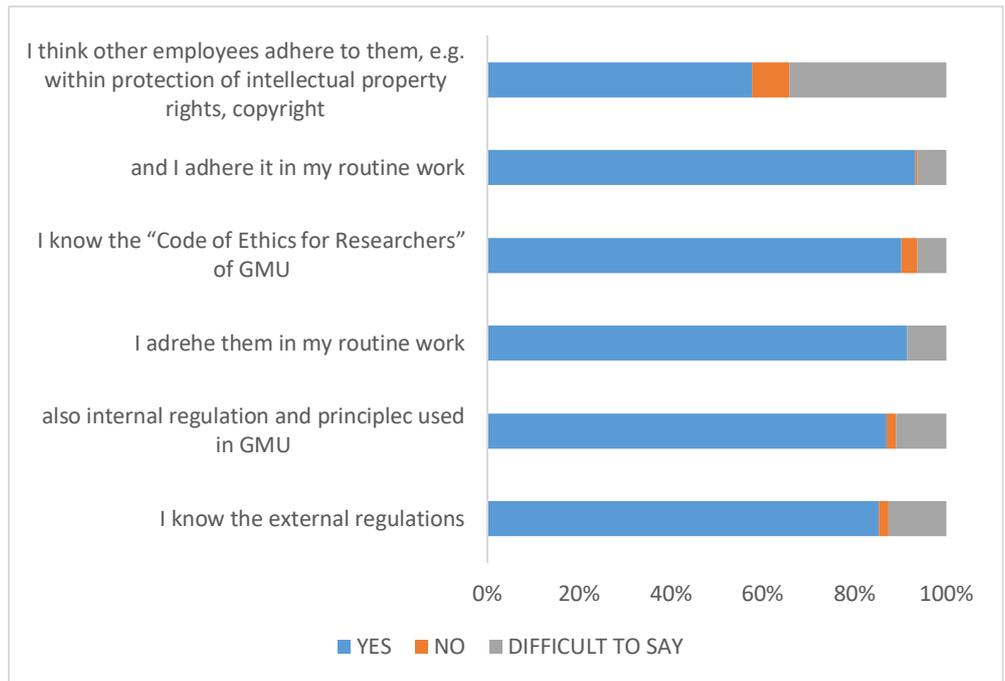


Fig. 17. Evaluation of the University support for realisation, protection and dissemination of research results

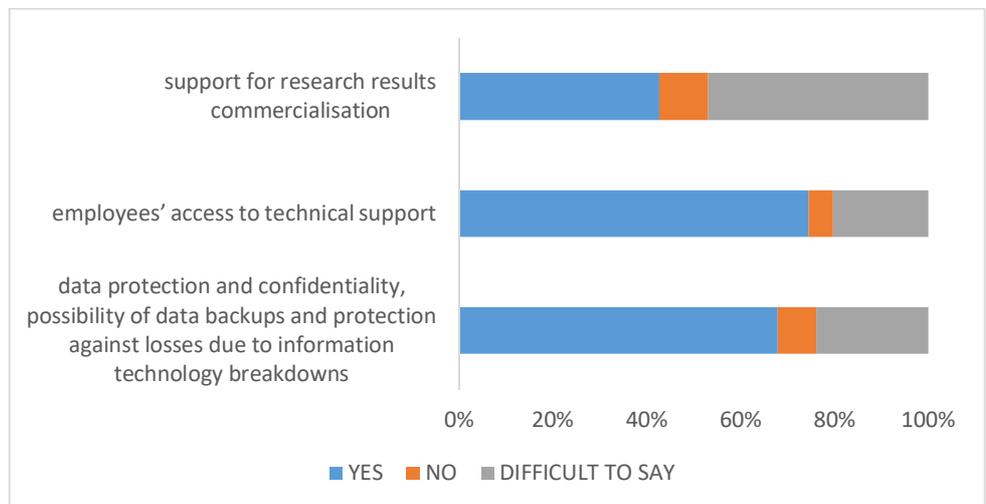


Fig. 18. Evaluation of availability of GMU financial support to publish research results in journals

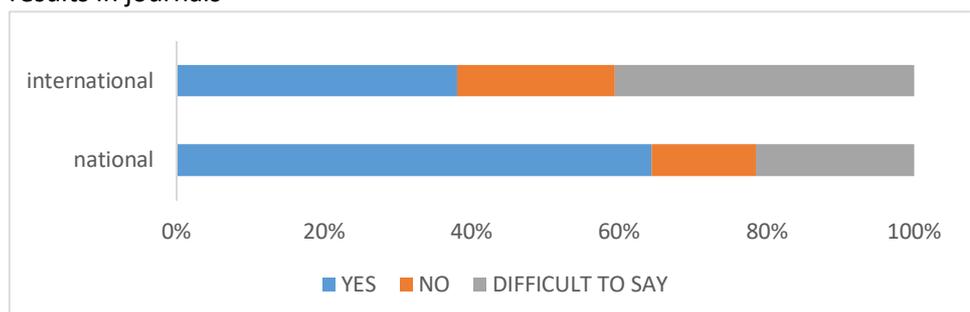


Fig. 19. Evaluation of availability of GMU financial support for dissemination of research results of researchers and their participation in conferences

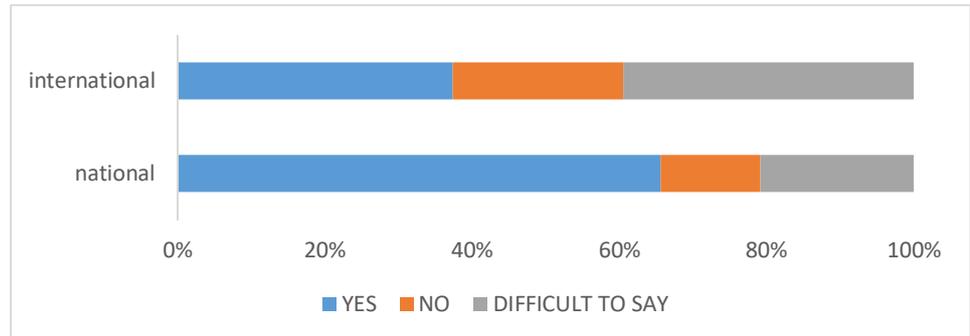


Fig. 20. Occurrence of discrimination practices – divided according to criteria indicated in the questions

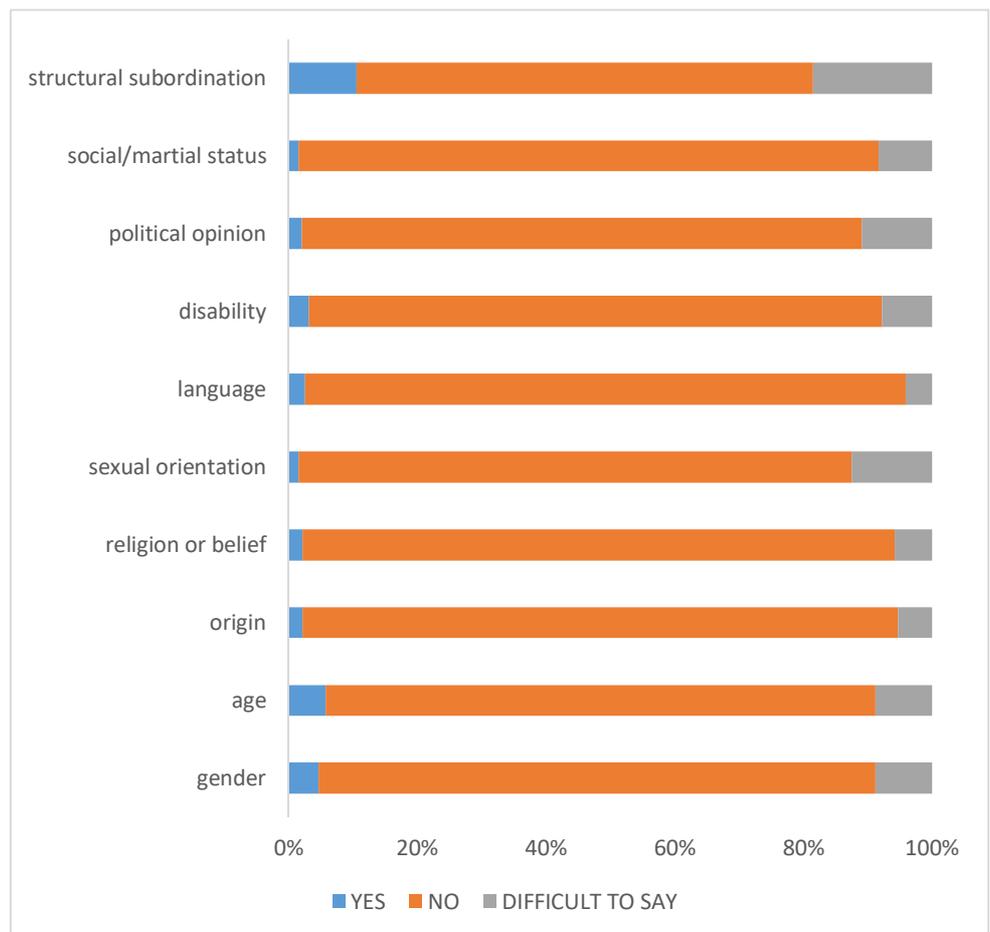


Fig. 21. Evaluation of the procedures implemented in GMU for employees' appraisal

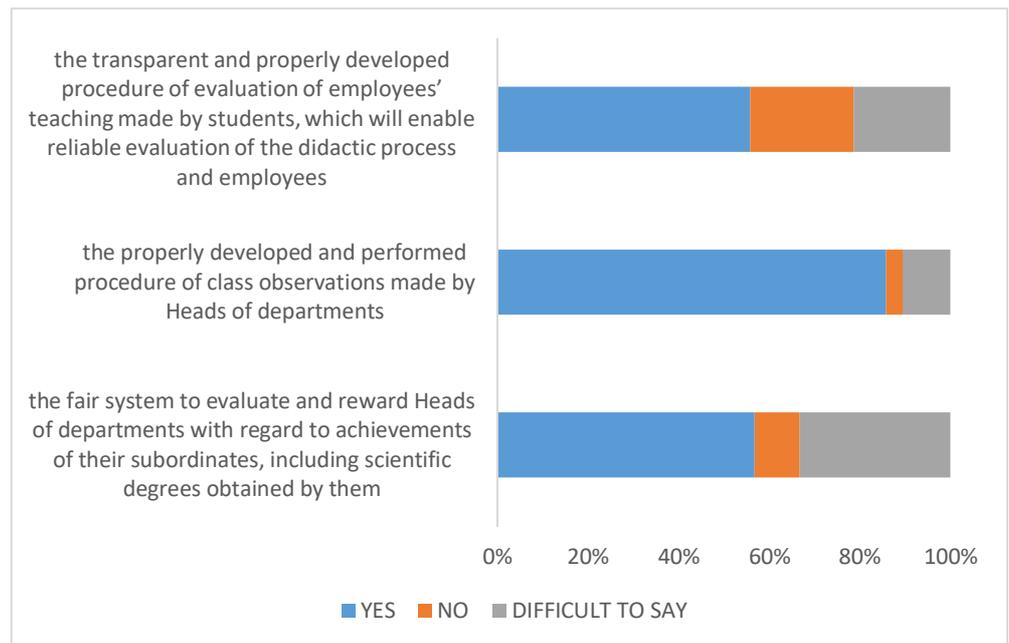
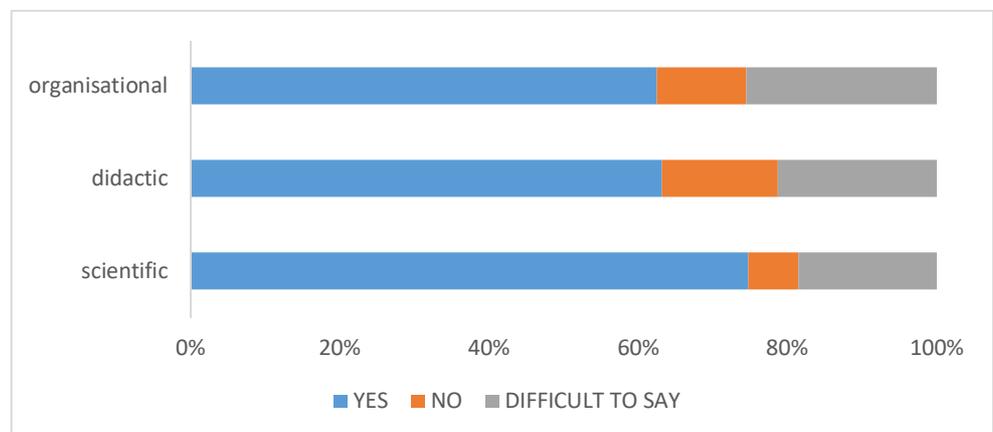


Fig. 22. Evaluation of the mechanism implemented by GMU to ensure the transparent and fair periodic appraisal system and evaluation of transparency in the criteria used to evaluate employees' achievements



Part II. Recruitment

This part of the report presents the survey results relating to aspects of academic teachers' recruitment – Figures 23 and 24.

Fig. 23. In the recruitment process GMU ensures availability of the information on:

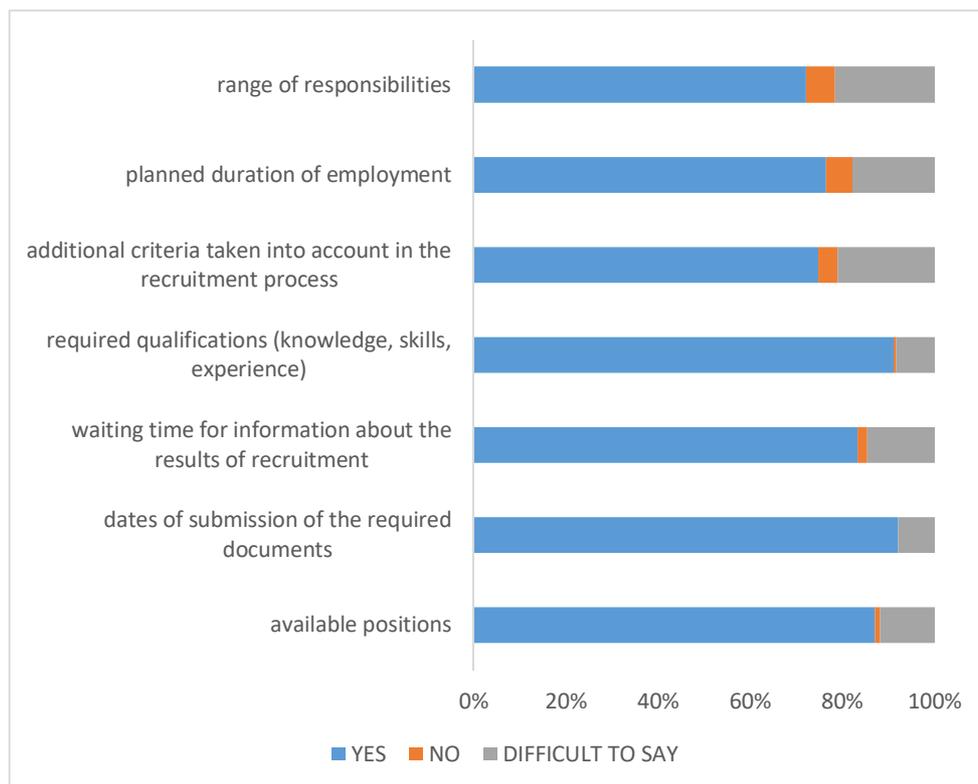
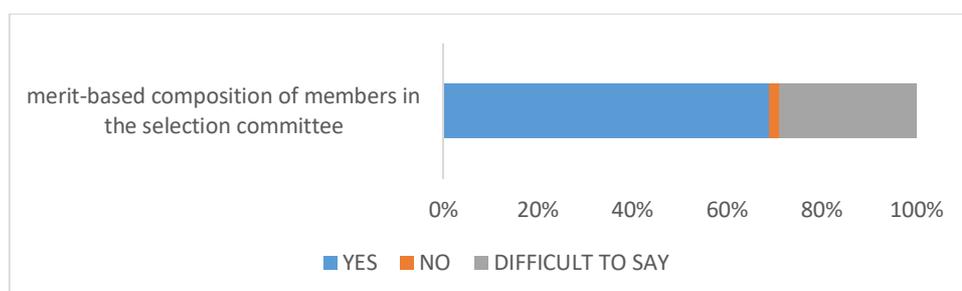


Fig. 24. Does GMU use in recruitment



Part III. Working conditions and social safety

This part of the report contains the survey results relating to evaluation of working conditions and work safety. The results are presented in Figures 25 – 35.

Fig. 25. Ways the University ensures working conditions (including OHS) and performance of scientific research

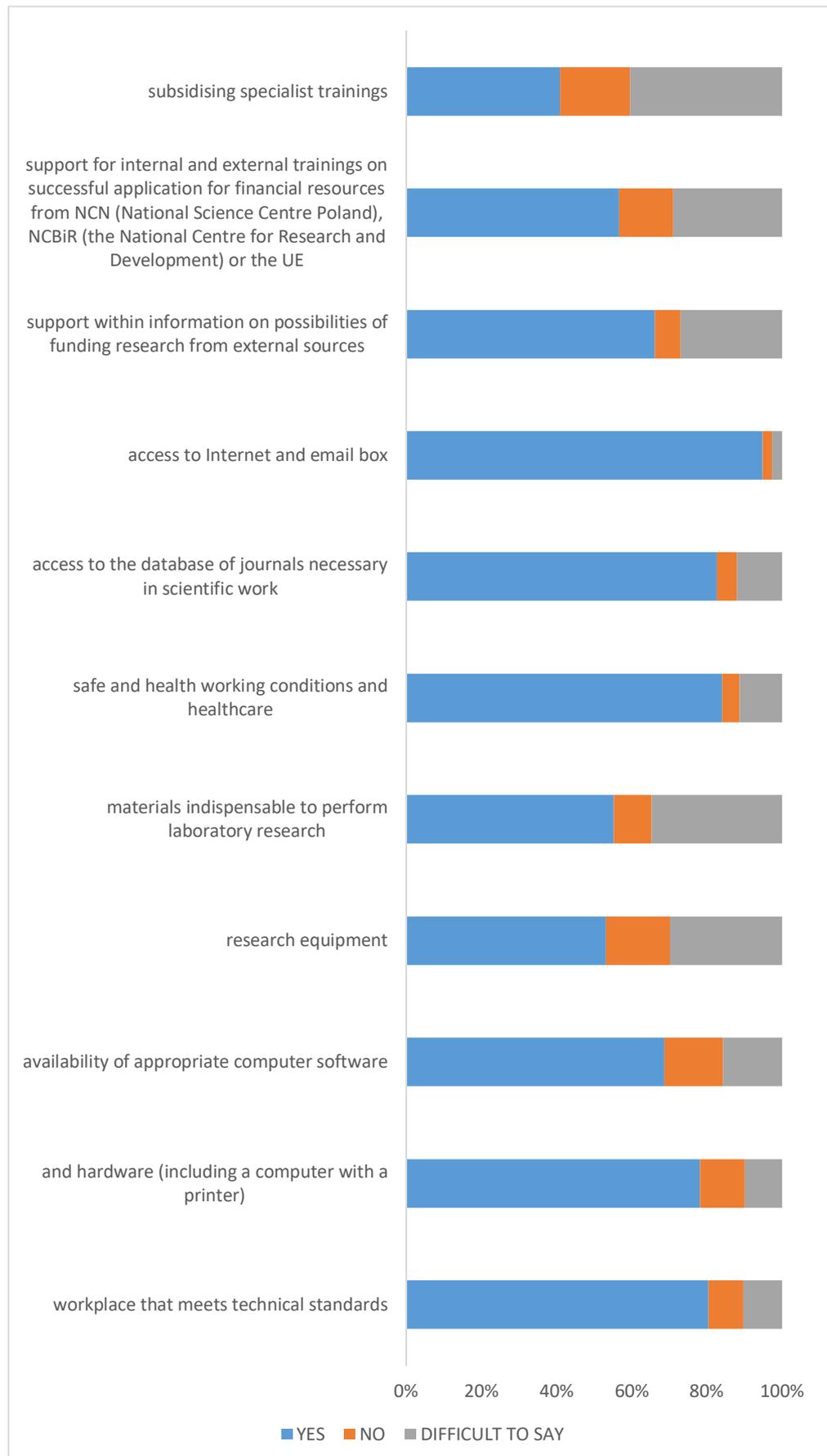


Fig. 26. The University ensures attractive and fare funding of scientific research

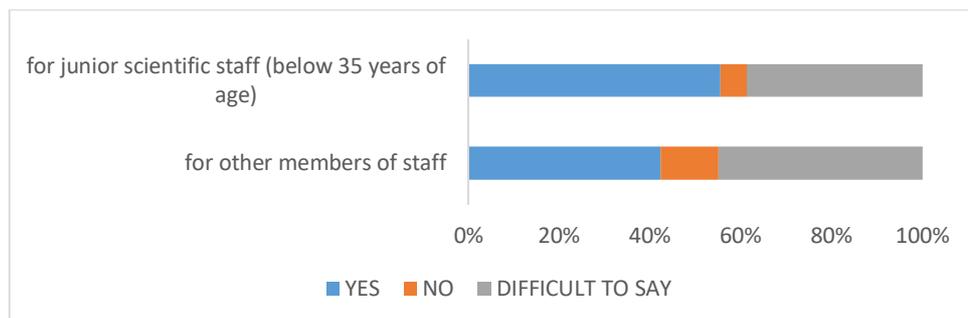


Fig. 27. GMU offers

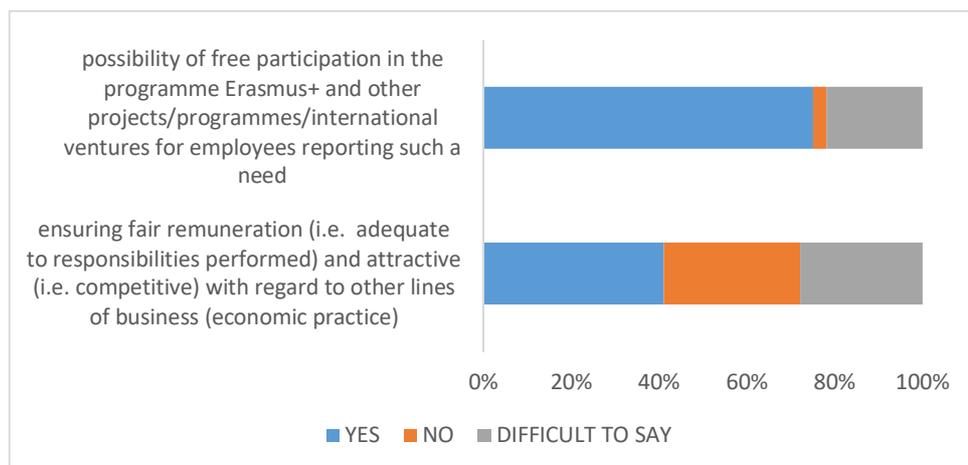


Fig. 28. The University ensures access to:

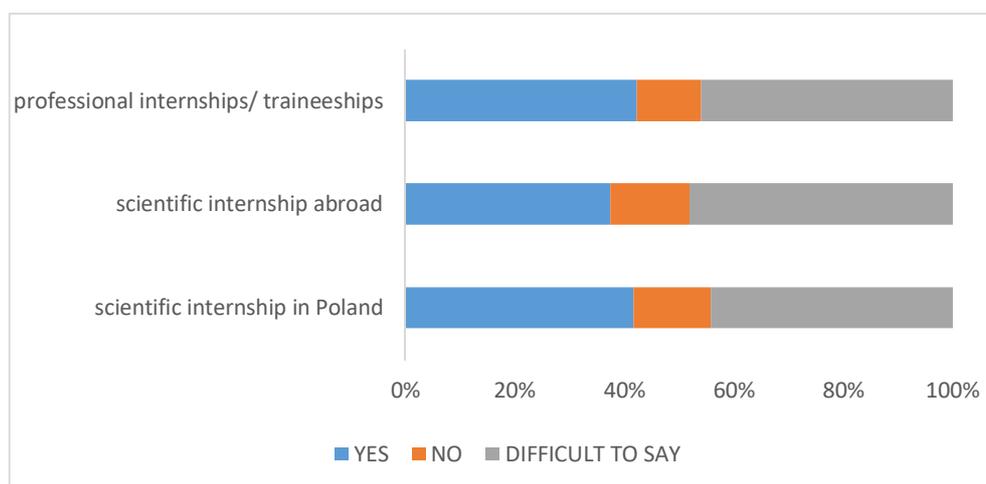


Fig. 29. GMU motivates employees to develop their professional career by:

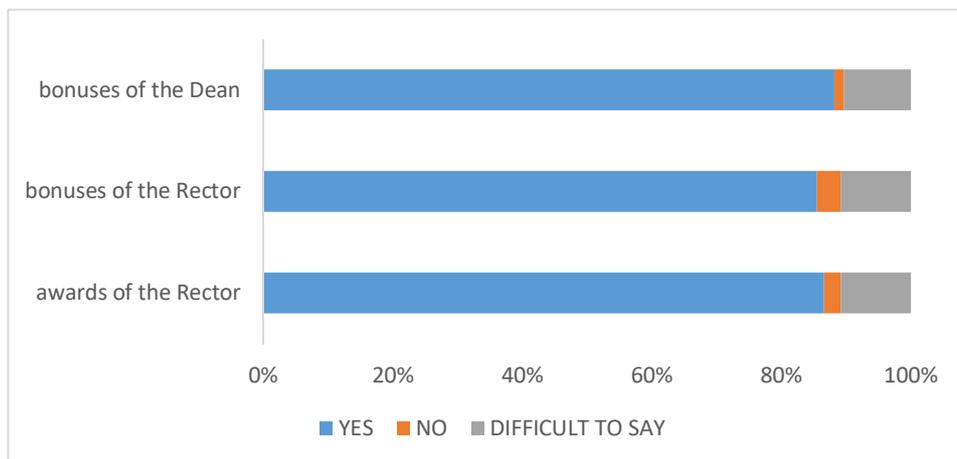


Fig. 30. GMU supports combining family and work, children and scientific career, and within this area it ensures:

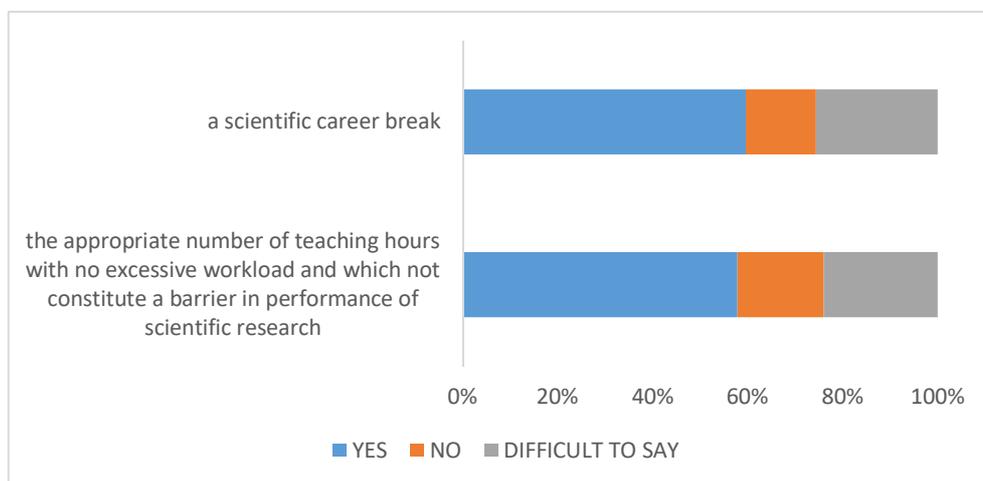


Fig. 31. GMU ensures working conditions and conditions for performance of scientific research, including job security and social security through:

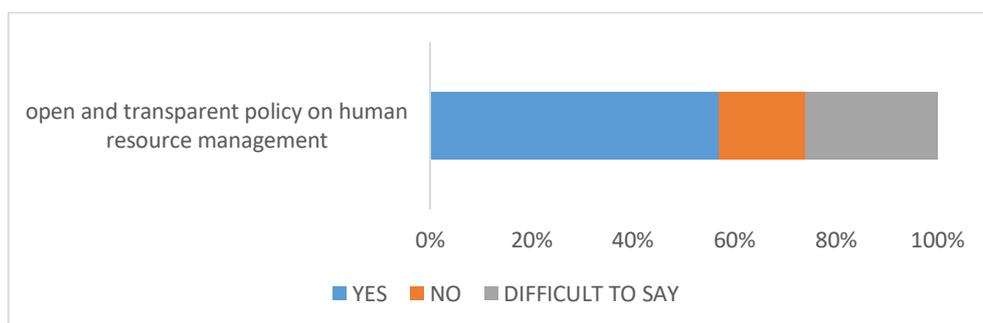


Fig. 32. The University ensures stabilisation and job security, including:

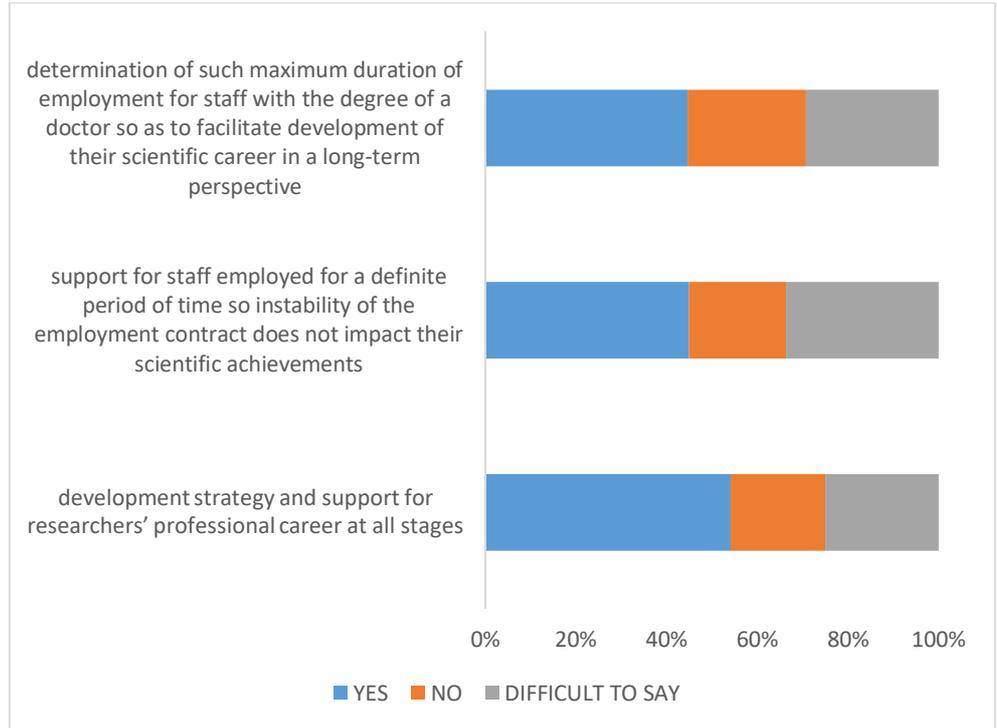


Fig. 33. GMU ensures working conditions and conditions for performance of scientific research, including job security and social security through:

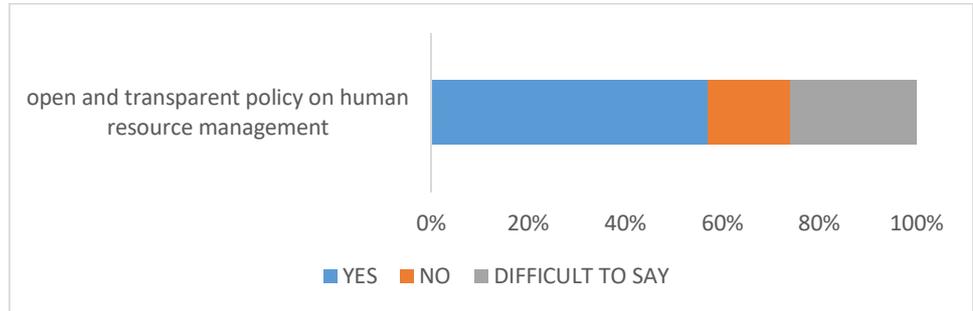


Fig. 34. The University ensures:

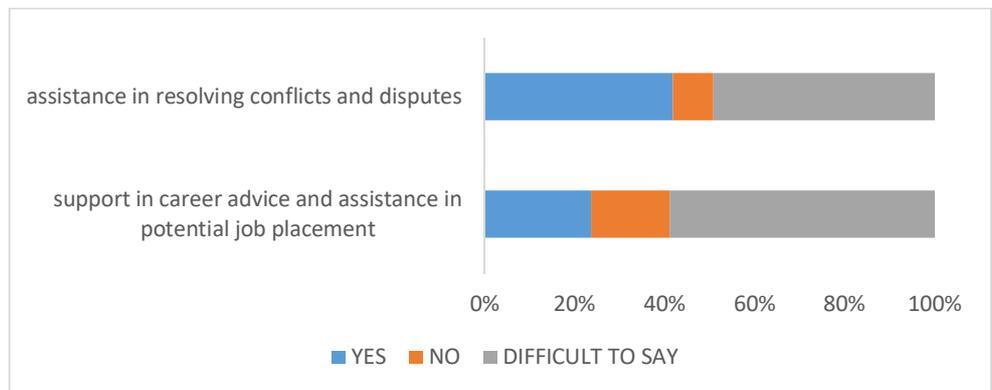
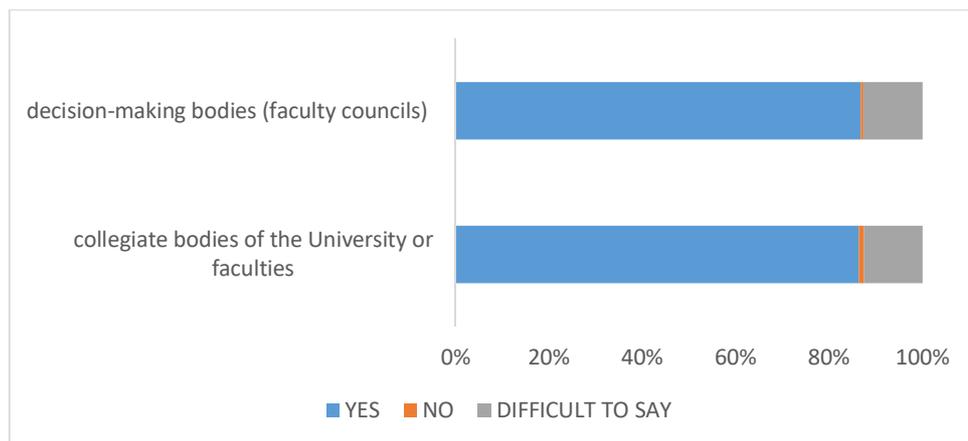


Fig. 35. GMU enables participation of staff representatives in:



Part IV. Training

The fourth part of the report, which corresponds to the European Charter for Researchers, includes issues relating to relationships of supervisor- subordinate, supervision and managerial duties, further professional development, as well as the access to scientific trainings and continuous development. The responses to the formulated questions are presented in Figures 36 – 40.

Fig. 36. GMU ensures scientific supervision, within which:

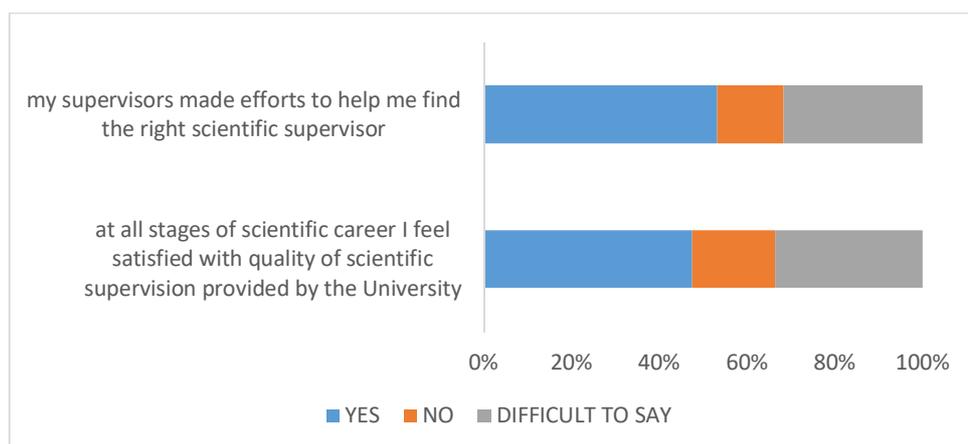


Fig. 37. Thanks to the University's efforts my scientific supervisor is a concrete, clearly defined person, who:

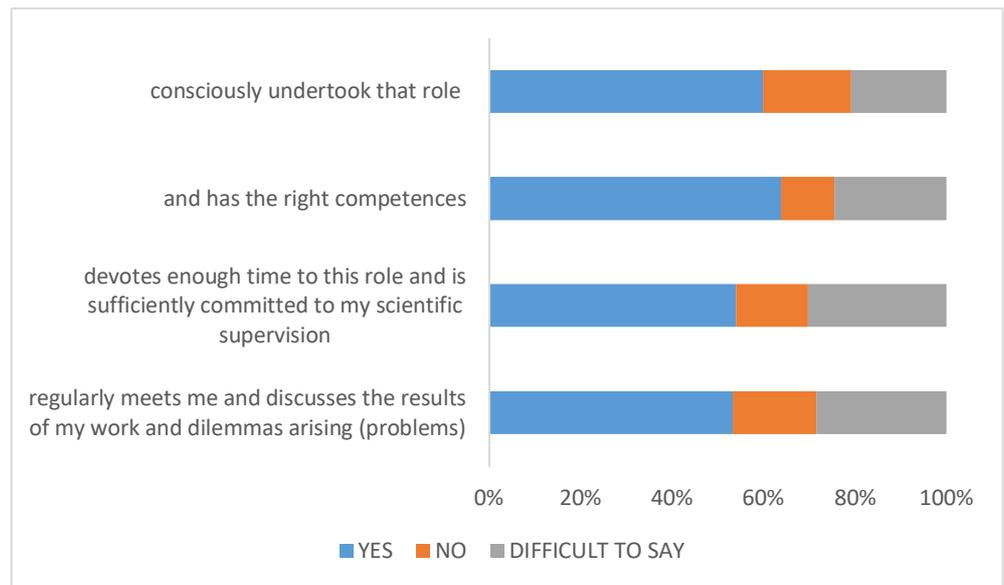


Fig. 38. The conditions for scientific and professional development created by GMU are characterised by:

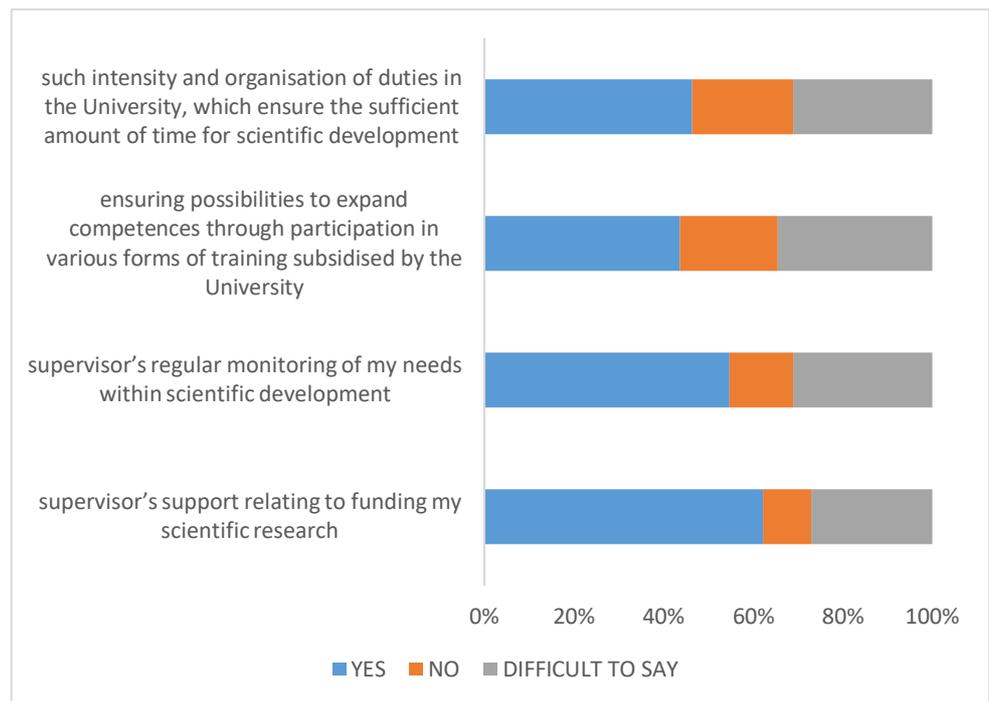


Fig. 39. Within the practices used in GMU with regard to staff supervision and management, department Heads and other researchers with a greater level of autonomy in accordance with the highest professional standards:

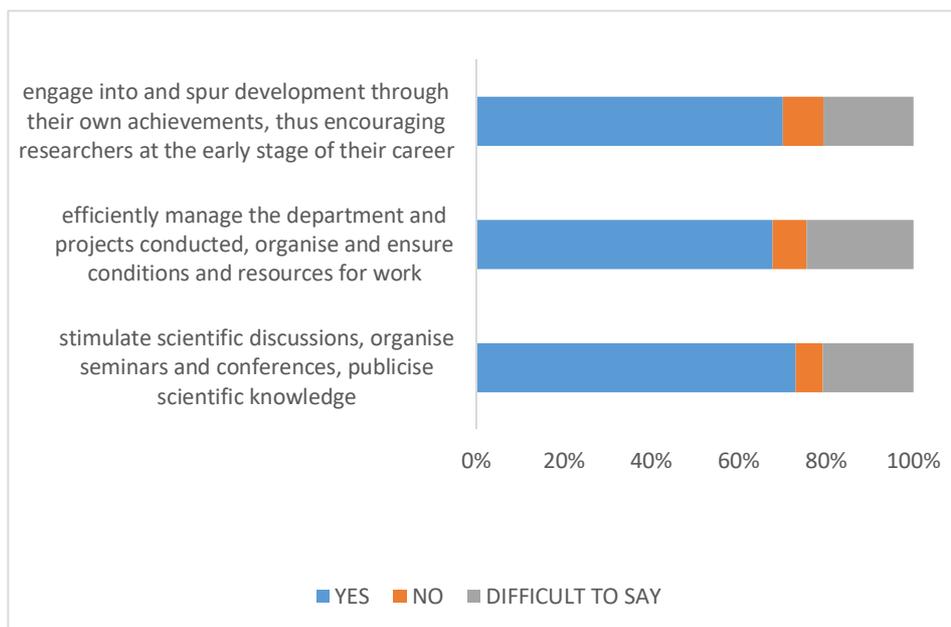
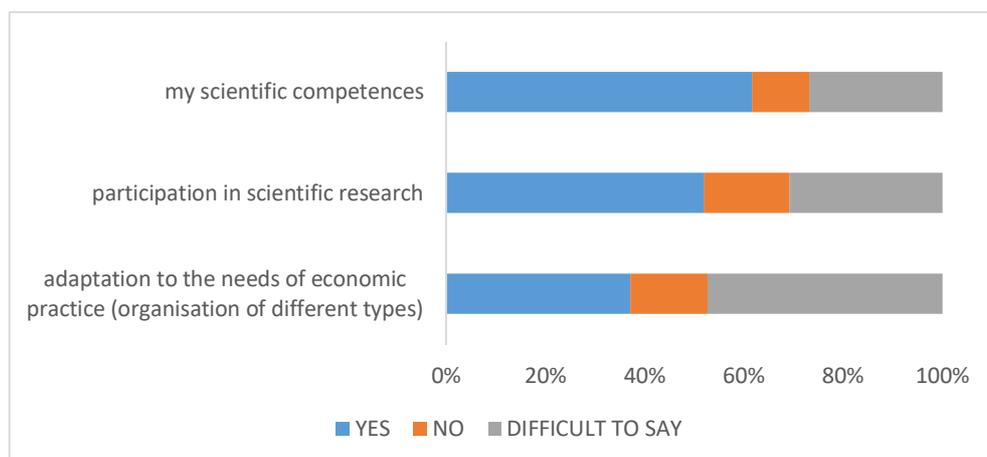


Fig. 40. The University has offered conditions, thanks to which over the last 5 years the following have increased:



c. Gap analysis and OTM-R

The next stage in the Team’s works was to get acquainted with the structure of the document of the Gap Analysis and to develop the survey that will facilitate a detailed diagnosis of consistency of the existing in GMU conditions for researchers’ employment and work with regard to the conditions laid down in the Charter and Code.

Table 2. Gap analysis

| European Charter for Researchers and Code of Conduct for the Recruitment of Researchers: GAP analysis overview | | |
|---|--|---|
| Status: + = fully implemented +/- = almost but not fully implemented -/+ = partially implemented - = insufficiently implemented | In case of -, -/+, or +/-, please indicate the actual “gap” between the principle and the current practice in your organisation. If relevant, please list any national/regional legislation or organisational regulation currently impeding implementation | Initiatives already undertaken and/or suggestions for improvement |
| I. Ethical and Professional Aspects | | |
| 1. Research freedom | | |
| <p>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 recognised ethical principles and practices. Researchers should, however, recognise 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 recognised ethical principles and practices, to which researchers have to adhere.</p> | | |
| +/- | <p>Scientific didactic employees of GMU enjoy freedom of research to the extent that corresponds to their interests. They enjoy freedom to identify research methods and practices in their research. This opinion was confirmed by about 90% respondents. Employees identify a need to undertake actions to initiate projects, including interdisciplinary projects, which will combine competences of particular employees, departments and faculties. The respondents claim that interdisciplinary projects can contribute to strengthening of interdisciplinary competences of independent teams and to expansion of the research offer of the University.</p> <p>The only limitations that scientific-didactic employees see in their activity result from the national regulations on public procurement, which to a certain degree limit their freedom to purchase research equipment and also cause that the process of purchase is long-lasting owing to complexity of purchasing procedures laid down in the Public Procurement Law.</p> | <p>Action Required:</p> <p>Coordination of initiation actions relating to research projects on the level of the faculty and department and implementation of new regulations enabling formation of new research teams, including interdisciplinary teams.</p> <p>Mainstreaming the information flow through information meetings and trainings.</p> |

| | | |
|--|---|---|
| <p>2. Ethical principles Researchers should adhere to the recognised 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.</p> | | |
| -/+ | <p>The appropriate national and University regulations were implemented, consequently about 90% respondents declare they know and adhere to ethical principles. Less than 60% think that also other employees adhere to them, among others with regard to intellectual property protection. Yet, the results of the survey also show that there is a need to update employees' knowledge within this area.</p> | <p>Action Required:</p> <ul style="list-style-type: none"> • Remodelling access to information and the internal regulations of GMU in the Intranet and Extranet systems of the University. • Implementation of mechanisms and tools enabling transparent monitoring of employees' engagement in research results – Implementation of the University Repository of Scientific Achievements (USEDN). |
| <p>3. Professional responsibility 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, provided that 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.</p> | | |
| +/- | <p>The appropriate regulations concerning adherence to intellectual property protection rights, both on the national and University level, were implemented and about 80% respondents confirm they are familiar with them and adhere to them. The results of the survey also show that some scientific-didactic employees do not know these regulations or they are not able to state if these regulations were implemented and if they are binding.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Remodelling access to information and the internal regulations of GMU in the Intranet and Extranet systems of the University. • Planning and conducting a series of trainings on intellectual property protection rights. • Creating a new job position or an organisational unit, on the central level, having enhanced competences within intellectual property rights and commercialisation of research. |

| | | |
|---|--|--|
| <p>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.</p> | | |
| <p>+/-</p> | <p>Scientific-didactic employees are familiar with the scope, goals and funding mechanisms of research projects, which they confirmed in the questionnaire survey.</p> <p>In some cases they pointed to a lack of the efficient flow of information concerning changes in the schedules of grants competitions for research works.</p> <p>The survey results also showed that they feel there is a lack of information relating to the principles of research funding.</p> | <p>Action Required:</p> <ul style="list-style-type: none"> • Regular publication and updates of information on the binding regulations. • Planning and conducting trainings on mainstreaming processes of realisation of research projects. • Creating a new job position or an organisational unit, on the central level, having enhanced competences within coordination, monitoring and updates of employees on scopes, goals and funding mechanisms in grants competitions for research projects. • Activities of the University internal Contact Point supporting researchers on the formal-technical level within initiation and realisation of research projects. |
| <p>5. Contractual and legal obligations 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.</p> | | |
| <p>+/-</p> | <p>Majority of scientific-didactic employees of GMU have knowledge on available trainings and working conditions, the regulations on intellectual property protection and the regulations concerning the conducted research projects. However, they pointed to a need to systematise and update this knowledge.</p> | <p>Action Required:</p> <ul style="list-style-type: none"> • Remodelling access to information and the internal regulations of GMU. • Planning and conducting a series of trainings on intellectual property protection rights. |

| | | |
|--|---|--|
| 6. Accountability | | |
| <p>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 authorised audits of their research, whether undertaken by their employers/funders or by ethics committees.</p> <p>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.</p> | | |
| + | <p>Scientific-didactic employees of GMU are informed and are aware of the need to ensure special attention, transparency, reliability and efficiency towards the employer or the funder of research. It is essential for scientific-didactic staff to provide the employer or the funder with all the necessary documents, reports or research results in case of external or internal control.</p> | <p>Action required: does not require action</p> |
| 7. Good practice in research | | |
| <p>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 fulfill them at all times.</p> | | |
| +/- | <p>Scientific-didactic employees are obliged to participate in occupational health and safety courses organised on a regular basis. However, in the survey they pointed to a lack of sufficient technical support within areas of: information technology, data archiving and data security and protection.</p> | <p>Action Required:</p> <ul style="list-style-type: none"> • Planning and conducting trainings on data protection and security as well as implementing support mechanisms of maintenance and purchase of equipment for scientific research and the system of effective IT support including data archiving. |
| 8. Dissemination, exploitation of results | | |
| <p>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, commercialised. 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.</p> | | |
| -/+ | <p>Scientific-didactic employees of GMU publish their research results and participate in national and international conferences. Nevertheless, there is a need to increase funding allocated to it as well as a need to fund patent applications and licenses. Some employees indicate a need for language support in writing scientific articles.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Development of mechanisms for current support in raising funding for researchers' participation in conferences (konkurs NCN Miniatura; |

| | | |
|--|--|--|
| | <p>A numerous group are employees who point to scarcity of financial resources allocated to publications and conferences. Especially, this refers to foreign publications and conferences, where 2/3 of respondents of the survey negatively evaluated the level of funding. Consequently, participation in international conferences is limited, which additionally means they do not get to know the scientific community, have no scientific contacts and no prospects for joint projects. Similar financial obstacles were identified as a factor limiting possibilities to publish in foreign journals, including the commonly pointed problem of no financial resources allocated to a language review of their scientific articles. There is also a lack of widely understood language support, including language training for employees.</p> <p>Responders' answers concerning deficiencies of the existing in GMU system of funds allocation to foreign visits focus on difficulties in obtaining funds for conferences that do not publish proceedings indexed in WoS.</p> <p>The implementation of mechanisms of additional funding for scientific publications and courses of scientific writing was already initiated.</p> <p>In the present year the system for employees' appraisal was modified and a new criterion taking into account employees' engagement in mentor support aiming at initiation of new research problems, including initiation of research projects, was introduced.</p> | <p>(English: competition "Miniature" of the National Science Center).</p> <ul style="list-style-type: none"> • Continuation of the implementation process of the regulations on funding patent applications within commercialisation of research results and creating a new job position or an organisational unit, on the central level, having enhanced competences within patent counselling. • Development of the database of available grants competitions and initiatives supporting science popularisation. • Activities of the University internal Contact Point supporting initiation and realisation of research and development projects. • Development of the system of dissemination and promotion of research results, also in open databases. |
| <p>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.</p> | | |
| + | Scientific-didactic employees initiate numerous actions, on the local and regional level, to popularise science, e.g. science festivals, organisation of contests for school youth, conducting open lectures, work in expert teams, etc. | Action required: does not require action |
| <p>10. Non discrimination 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.</p> | | |

| | | |
|---|--|--|
| + | <p>The generally adopted principle is to ensure equality for all scientific-didactic employees in all the areas.</p> <p>Respondents of the survey generally indicated there is no observable discrimination. Every tenth respondent identified a possibility of existence of certain discriminating behaviours due to supervisor-subordinate relationships.</p> | <p>Action required: does not require action</p> |
| <p>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.</p> | | |
| +/- | <p>The appraisal system of scientific-didactic employees, which was introduced, needs improvement as it does not reflect the objective picture of employees' actual engagement. In the open question in the questionnaire survey employees commented on two aspects:</p> <ul style="list-style-type: none"> - the appraisal carried out by supervisors; - the appraisal carried out by students on the basis of questionnaires. <p>Respondents pointed to a need to modify the existing appraisal system of scientific-didactic employees, so that it will take into account organisational activities.</p> <p>The governing principle of the existing appraisal system are the results of anonymous questionnaires, in which students evaluate didactic activities conducted by the employee. Some respondents think that questionnaires are unreliable and not objective. They pointed to a need to modify both the questions and the very procedure of conducting the questionnaire.</p> <p>In 2017 the new system of employees appraisal was implemented that takes into account scientific, organisational and research activities. Criteria of the appraisal vary with regard to particular group of employees (R1-R4) and with regard to groups of employees holding executive positions taking into account development of employees working under them.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Improvement of the existing appraisal system of employees by students. |
| <p>12. Recruitment 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.</p> | | |

| | | |
|--|--|--|
| +/- | The recruitment procedure is based on the national regulations and the internal regulations of the University. Nevertheless, to increase transparency some components must be modified and improved. The lack of procedures and criteria for the appraisal of a candidate returning to a scientific career was identified. | Action required: <ul style="list-style-type: none"> Updating the existing detailed procedure ISO P5-4 "Zarządzanie zasobami ludzkimi" (English: "Human resource management") in recruitment of scientific-didactic employees (advertising, recruitment, results announcement), taking into account additional criteria for people returning to a scientific career. |
| <p>13. Recruitment (Code)</p> <p>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 specialised 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.</p> | | |
| +/- | The existing GMU recruitment procedure contains insufficiently detailed descriptions of working conditions, entitlements, career development prospects and planned duration of employment. | Actions required: <ul style="list-style-type: none"> Development of the recruitment procedure that will include a description of working conditions, entitlements, career development prospects, planned duration of employment. Development of guidelines for the faculties on recruitment for a position of the academic teacher taking into account evaluation of usefulness of the candidate's qualifications for the needs of the position regardless of time and place of the present employment. Updating the existing detailed procedure ISO P5-4 "Zarządzanie zasobami ludzkimi" (English: "Human resource management") in recruitment of scientific-didactic employees. |

14. Selection (Code)

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 should be realistic.

| | | |
|-----|---|---|
| +/- | <p>The existing procedure of recruitment of a scientific-didactic employee does not take into account guidelines on composition of the selection committee and adequacy of its members' competences, as well as openness of the committee to include an external expert. This procedure does not foresee the obligation to hold a job interview in the presence of the committee.</p> <p>In the survey 31% respondents pointed to unprofessional composition of the members of the recruitment committee.</p> | <p>Action Required:</p> <ul style="list-style-type: none"> • Development of guidelines for the faculties on recruitment for a position of the academic teacher taking into account evaluation of usefulness of the candidate's qualifications for the needs of the position regardless of time and place of the present employment. • Updating the existing detailed procedure ISO P5-4 "Zarządzanie zasobami ludzkimi" (English: "Human resource management") in recruitment of scientific-didactic employees. |
|-----|---|---|

15. Transparency (Code)

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.

| | | |
|-----|---|---|
| +/- | <p>The general requirement of transparency in the recruitment procedure was already defined and met. Nevertheless, it is necessary to pay more attention to a more detailed description of the position, financial terms, career path prospects and the feedback information on candidates' strengths and weaknesses.</p> | <p>Action Required:</p> <ul style="list-style-type: none"> • Development of guidelines for the faculties on recruitment for a position of the academic teacher taking into account evaluation of usefulness of the candidate's qualifications for the needs of the position regardless of time and place of the present employment. • Updating the existing detailed procedure ISO P5-4 "Zarządzanie zasobami ludzkimi" (English: "Human resource management") in recruitment of scientific-didactic employees. |
|-----|---|---|

| | | |
|--|---|---|
| | | <p>resource management”) in recruitment of scientific-didactic employees.</p> <ul style="list-style-type: none"> • Defining the catalogue of indispensable requirements for candidates, which will have to be taken into account in the recruitment procedure, so that they are easy to understand and uniform with all recruitment actions undertaken on the University level. |
| <p>16. Judging merit (Code)</p> <p>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.</p> | | |
| +/- | <p>In the recruitment process in GMU both qualitative and quantitative merits relating to experience and potential of researchers are taken into consideration. However, in practice majority of advertised job vacancies refer to recruitment for a scientific-didactic position, although there is a need to employ a person for only one of these positions. Moreover, apart from bibliometric indicators, no other evaluation criteria are taken into account, such as e.g. didactics, scientific support, team work, knowledge transfer, research management, or actions undertaken in the areas of innovations, popularisation of scientific knowledge in the society, and also contribution in patents and inventions.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Enhancement of the recruitment process by introducing indicators that take into account other merits, not only bibliometric merits. • Development of guidelines for the faculties on recruitment for a position of the academic teacher taking into account evaluation of usefulness of the candidate’s qualifications for the needs of the position regardless of time and place of the present employment. • Updating the existing detailed procedure ISO P5-4 “Zarządzanie zasobami ludzkimi” (English: “Human resource management”) in recruitment of scientific-didactic employees. • Development and implementation of selection criteria in GMU (as the |

| | | |
|---|--|---|
| | | <p>maritime university), which will ensure that in the recruitment process candidates with maritime diplomas will be treated as having sufficient essential competences for some positions, which is in compliance with the requirements of the international regulations resulting from the Convention STCW.</p> |
| <p>17. Variations in the chronological order of CVs (Code) Career breaks or variations in the chronological order of CVs should not be penalised, 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.</p> | | |
| +/- | <p>Breaks in scientific careers do not constitute barriers in the recruitment process.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Development of guidelines for the faculties on recruitment for a position of the academic teacher taking into account evaluation of usefulness of the candidate’s qualifications for the needs of the position regardless of time and place of the present employment. • Updating the existing detailed procedure ISO P5-4 “Zarządzanie zasobami ludzkimi” (English: “Human resource management”) in recruitment of scientific-didactic employees. • Introduction of the one-time job competition procedure, which means that during recruitment in the University an applicant takes part in the competition procedure only once regardless of further changes of the position or employment breaks. |

| | | |
|---|---|---|
| <p>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.</p> | | |
| -/+ | <p>Information on available programmes of mobility of scientific-didactic staff was introduced as a permanent element of the Intranet enhancements. Nevertheless, mobility of scientific-didactic employees gains no recognition, neither in the periodic appraisal of the employee nor in recruitment of candidates for available vacancies.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Taking into account in the appraisal process any mobility experience of scientific didactic employees at any stage of their scientific career. |
| <p>19. Recognition of qualifications (Code) Employers and/or funders should provide for appropriate and evaluation of the academic and professional qualifications, including non-formal 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.</p> | | |
| -/+ | <p>In compliance with the national requirements, academic and vocational qualifications of employees are recognised in AMG. An exception are some qualifications (e.g. maritime diplomas) acquired in industry, which are not considered as a valuable factor in the periodic appraisal of the employee.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Development of guidelines for the faculties on recruitment for a position of the academic teacher taking into account evaluation of usefulness of the candidate's qualifications for the needs of the position regardless of time and place of the present employment. • Updating the existing detailed procedure ISO P5-4 "Zarządzanie zasobami ludzkimi" (English: "Human resource management") in recruitment of scientific-didactic employees. |
| <p>20. Seniority (Code) 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 recognised.</p> | | |

| | | |
|--|--|--|
| +/- | Qualifications of the candidate constitute the basic criterion of evaluation, regardless of time and place of their acquisition. Due to the University profile more attention is increasingly paid to the fact whether the candidate is a holder of the maritime diploma or not, both in external and internal recruitment. | Action required: <ul style="list-style-type: none"> • Development of guidelines for the faculties on recruitment for a position of the academic teacher taking into account evaluation of usefulness of the candidate's qualifications for the needs of the position regardless of time and place of the present employment. • Updating the existing detailed procedure ISO P5-4 "Zarządzanie zasobami ludzkimi" (English: "Human resource management") in recruitment of scientific-didactic employees. |
| 21. Postdoctoral appointments (Code) 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. | | |
| +/- | Many respondents expressed their dissatisfaction with changes and inconsistency of the currently binding national regulations concerning employees with the degree of a doctor. At present the University is in a transitory period waiting for the change of law on higher education and implementing provisions to this law that will enable its implementation. Despite this situation, lately some actions have been undertaken to stabilise employment of scientific employees with the degree of a doctor by implementing the rotation procedure for academic teachers who have not obtained the degree of a doctor with habilitation within the statutory time. The implemented regulations enable employees, among others, to realise their professional development choosing either a fast-track scientific career path or a slow-track scientific career path. | Action required: <ul style="list-style-type: none"> • Implementation of new regulations on modelling the choice of a career path by GMU scientific-didactic employees. • Systematic adaptation of the internal GMU regulations on the choice of a career path (scientific or didactic) to the newly prepared law on higher education. |
| II. Working Conditions and Social Security | | |
| 22. Recognition of the profession 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). | | |

| | | |
|---|--|---|
| + | All people starting a scientific career gain recognition of their qualifications – they are offered special conditions created for their successful professional development. The support for these actions is the newly introduced University Repository of Scientific Achievements (SED) of academic teachers, doctoral students and students of Gdynia Maritime University. This tool is designed to create a specific portfolio of the scientific-didactic employee, which is essential from the point of view of development of a career path and monitoring scientific development. | Action required: <ul style="list-style-type: none"> • Development and implementation of actions to obtain/gain financial means for competitive salaries for researchers at the early stage so as to encourage the best graduates and special/exceptional talents for scientific work in GMU. |
| 23. Research environment 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 programme. | | |
| +/- | The two faculties of GMU - Marine Engineering and Electrical Engineering – finished the realisation of the grant UE RIDAM, the result of which are a few, very modern laboratories to perform research . Moreover, employees can access virtual tools (e.g. PLATO PORTAL with virtual tools and specialist software), which can be used by researchers and students. However, many respondents pointed to a need to further develop and modernise the laboratory base, which will facilitate research and increase technical support relating to data security and tele-working security. | Action Required: Further consistently undertaken actions, the aim of which is to obtain financial resources for modernisation of research laboratories and technical support from the European Union funds. |
| 24. Working conditions 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, <i>inter alia</i> , 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. | | |
| +/- | Among the most frequently indicated needs within working conditions mentioned by respondents are: a lack of the appropriate computer, laboratory equipment and software as well as insufficient financial resources for research. Employees also pointed to a lack of sufficient resources allocated to access paid journals and specialist databases. The problem of evident scarcity of research basis was raised and resulting from it the insufficient number of significant scientific publications. Insufficient support for research | Action required: <ul style="list-style-type: none"> • Emphasis on enhancing activities of the office, which supports works on applications for external grants for every employee interested. |

| | | |
|---|---|--|
| | <p>and publications results in situations, where some of the needs of scientific-didactic employees are met with their own financial resources.</p> <p>Another important issue for respondents is also a lack of career breaks opportunities or a mechanism allowing for some limits of the teaching load for employees engaged in research projects or a lack of support for mothers of young children.</p> <p>Respondents also pointed to less important impediments, such as for instance: technical limits of mailboxes or no possibility of sending large attachments.</p> <p>In the same period, the Regulations were improved concerning scientific and research works and Statutory Activity grants allocated to the basic organisational units of GMU within grants to maintain research potential.</p> <p>The offer of research and interdisciplinary teams, which is updated on a regular basis was developed. Its aim is to intensify the process of commercialisation of research results and to increase openness of the University to the economy.</p> <p>In the structures of GMU there is an office (department), whose responsibilities are, among others,: tracking announcements of available grants competitions and formal-technical support in preparing applications for funds dedicated to research and scientific and research equipment.</p> <p>In order to improve working conditions GMU employees were offered a series of additional benefits within the social package, including: MultiSport card, access to extended health care.</p> | <ul style="list-style-type: none"> • Enhancement of working conditions of employees. |
| <p>25. Stability and permanence of employment 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 <i>EU Directive on Fixed-Term Work</i>.</p> | | |
| -/+ | <p>GMU employees with the degree of a doctor, who did not obtain the degree of a doctor with habilitation by the defined date, can choose a form of further employment for duration specified, or not specified, which could ensure job security. However, some assistant professors (R2) express their concern that the above mentioned form of employment may not concern all employees in this group.</p> <p>The issue raised in the survey is that the University focuses its interest only on the points obtained by employees and the date they are awarded the degree of a doctor with</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Development and implementation of the HR Strategy for Researchers. |

| | | |
|--|--|--|
| | <p>habilitation. Other forms of contribution are taken into account to a lesser extent, which was evaluated negatively by respondents. Even people awarded with a bonus or the Rector’s award for scientific results can be negatively verified due to a failure to keep the deadline for the degree of a doctor with habilitation.</p> <p>The implemented in 2017 rotation procedures, which aimed among others at prevention of dismissals of assistant professors by employing them in the positions of assistants, do not fully satisfy a considerable group of employees.</p> <p>Support for people employed on fixed-term contracts and currently fixed time contracts for employees with the degree of a doctor was positively evaluated by only 45% respondents. About 30% negative answers and about 30% answers “difficult to say” point to a need to introduce changes.</p> <p>Support to increase job security of employees is the implemented University Repository of Scientific Achievements (SED), which at the same time is a mechanism to monitor scientific development of employees.</p> | |
| <p>26. Funding and salaries</p> <p>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.</p> | | |
| +/- | <p>The system of salaries in the University is in line with the Resolution of the Minister of Science and Higher Education. Many respondents express their dissatisfaction with the level of salaries comparing them to the level of the average national salary and the market reality. It refers, first of all, to employees at the early stage (assistants – R1) and, to a lesser extent, assistant professors (R2). It also partly affects a possibility of hiring a researcher (assistant – R1). Such a situation may constitute a threat to staff hiring in the University. Yet, as it was emphasised, this is a phenomenon resulting from the national regulations and laws.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Undertaking efforts to identify additional sources of funding employees’ remuneration, especially in the early stage of their scientific career, so that it is financially attractive. • Stimulation of applications for grants and projects that fund equipment of the research base and scientific development. |
| <p>27. Gender balance</p> <p>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 on the basis of 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.</p> | | |

| | | |
|---|--|--|
| + | <p>The University ensures a gender balance at all levels of staff, including supervisory and managerial level. The recruitment process does not favour any gender; remuneration is the same for women and men employed on the same positions. There is also a representative balance at all career levels and decision-making bodies.</p> <p>Moreover, the conducted survey points unequivocally to the lack of gender discrimination (87% positive answers), whereas in answers to the open questions none of the respondents raised this issue.</p> <p>It can be stated that the policy of equal opportunity is fully realised in the University.</p> | Action required: does not require action |
| <p>28. Career development</p> <p>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.</p> | | |
| -/+ | <p>57% surveyed employees answered positively the question of the open and transparent human resource policy of the University. This policy is partly imposed by the Law on higher education, but at the same time, to a great extent, it is shaped by the University within its autonomy. The adopted solutions do not contribute to reduction of job insecurity with regard to professional future among employees of GMU - this problem was raised by many respondents in many open questions. 45% respondents evaluate positively the policy of the University of stabilisation and job security.</p> <p>The policy towards assistant professors (obliged to obtain the degree of a doctor with habilitation within 8 years) in comparison to the policy towards employees with the degree of a doctor holding the position of university professor (not obliged to obtain the degree of a doctor with habilitation) seems not to be fully accepted by R2 group.</p> <p>Nevertheless, in March 2017 the regulations introducing new positions and possibilities to pursue a scientific career path in different manners were introduced.</p> | Action required: <ul style="list-style-type: none"> • Development and implementation of the HR Strategy for Researchers and enhancement of internal tools for development of a career path. |

29. Value of mobility

Employers and/or funders must recognize the value of geographical, intersectorial, inter- and trans-disciplinary 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.

| | | |
|-----|--|--|
| -/+ | In evaluation of employees' professional development there are no mechanisms leading to recognition of the value of geographical, intersectorial, inter- and trans-disciplinary 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. Also support in accessing scientific internships in some other units was regarded as insufficient, which was confirmed by the surveyed employees (only 42% respondents evaluate positively support to access to national internships and 37% - to international internships). 11% - 14% respondents think that they do not have access to national and international internships. 46% - 44% have no opinion on this issue as they do not know principles and mechanisms relating to participation in internships. | Actions required: <ul style="list-style-type: none">• Development and implementation of the HR Strategy for Researchers taking into account the value of employees' mobility, both in the stage of recruitment and during the appraisal of the employee.• Adding an element of recognition of mobility to the indicators in the appraisal system of employees.• Development of the effective and common system of employees support in applying for national and international internships, and implementation of an effective mechanism of informing employees about programmes enabling applications for national and international internships. |
|-----|--|--|

30. Access to career advice

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.

| | | |
|--|--|--|
| - | <p>In GMU there is no offer of career advice for scientific-didactic employees. This is confirmed by 17% respondents. 59% respondents express the opinion “difficult to say”, which suggests a lack of knowledge with regard to this issue.</p> | <p>Actions required:</p> <ul style="list-style-type: none"> • Conducting a diagnosis of the needs relating to career advice. • Development and implementation of the procedures that will satisfy the needs of widely understood career advice • Expansion of competences of the Career Office currently operating in the University. |
| <p>31. Intellectual Property Rights 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 organisations, as possibly provided for under specific collaboration agreements or other types of agreement.</p> | | |
| -/+ | <p>There are binding principles and procedures on the copyright to the results of research conducted in the University. The costs of patents, from the stage of developing a patent application to the payment for protection in compliance with the binding regulations constitute a financial burden for the faculties. Due to a difficult financial situation Heads of particular units are not willing to fund the patent procedures. Therefore, in such a situation there is no subsequent stage, which should be commercialisation of the patent. A lack of access to advice within patent procedures was also pointed to. Changes were initiated enabling funding of processes of research results commercialisation.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Search for business partners and realisation of research for their needs, including development of the model for patent applications. • Creating a new job position or an organisational unit, on the central level, having enhanced competences within career advice. |
| <p>32. Co-authorship 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 recognised and listed and/or quoted, in the</p> | | |

context of their actual contributions, as co-authors of papers, patents, etc, or to publish their own research results independently from their supervisor(s).

| | | |
|-----|---|---|
| -/+ | <p>So far in GMU there have been no procedures introduced to provide researchers, including researchers at the early stage of their career, with necessary framework conditions to enjoy the right to be recognised, be listed as a co-author or be quoted, in the context of the actual contribution they have in works, patents, etc. as well as the right to publish their research results independently of their scientific supervisors.</p> <p>This issue has been identified in the University. Lately the procedure has been implemented to declare co-authorship already in the stage of preparing a publication. This declaration takes into account the percentage share of the actual contribution of each co-author.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Planning and holding information meetings to acquaint employees at all levels with procedures and rights of the author with regard to determination of co-authorship. |
|-----|---|---|

33. Teaching

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.

| | | |
|-----|---|---|
| -/+ | <p>There is no mechanism in the University taking into account time devoted to training researchers at the early stage of their career by senior members of the staff as a part of their teaching commitment.</p> <p>Lately the Regulations on remuneration for employees of Gdynia Maritime University, excluding crew members of the training vessels has been implemented - it regulates the issue of remuneration for hours devoted to didactic and scientific work.</p> <p>In the survey only 46% employees evaluated positively the ratio of didactic workload to organisational workload to the extent, which enables simultaneous scientific development.</p> <p>This problem was also identified in the open questions. About 30% respondents have no opinion on this issue.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Enhancement of the periodic appraisal procedure of scientific-didactic employees, which will take into account organisation of internal trainings on the issues relating to didactic processes (teaching) for researchers at the early stage by more experienced staff. |
|-----|---|---|

34. Complains/ appeals

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.

| | | |
|-----|--|---|
| +/- | <p>In the University there are binding procedures and mechanisms enabling employees to appeal from the results of the periodic appraisal or to make complaints. Disciplinary commissions are also appointed. However, employees identified a need to make the system of resolving conflicts and disputes more efficient. About 9 % of employees negatively viewed this issue and another 50% answered “difficult to say”.</p> <p>There are no procedures in GMU ensuring confidential and informal assistance in resolving work-related conflicts.</p> <p>A new possibility of making complaints, but also submitting ideas and proposals of improvement, was offered by the box of “new ideas and grievances” introduced by the Rector for some time.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Enhancement of the regulations on the system of resolving conflicts and disputes enabling formation of confidential and informal assistance in resolving conflicts. Such a process will be supported by appointing a University or faculty trustworthy intermediary. The additional element will be the box of “new ideas and grievances” as a permanent form of developing partner management of the University and direct communication of the Rector with all employees. |
|-----|--|---|

35. Participation in decision-making bodies

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, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution.

| | | |
|---|---|---|
| + | <p>GMU employees are guaranteed the right to be represented in decision-making organs and collective bodies of the University. 90% respondents confirm this fact. In the University there are also two trade union organisations.</p> <p>In the open questions there appeared occasional signals concerning a lack of influence of assistant professors on decisions of the Faculty Councils. However, this situation is connected with composition of the Councils resulting from the Law on higher education.</p> | <p>Action required :</p> <p>does not require action</p> |
|---|---|---|

III. Training and Development

36. Relation with supervisors

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.

| | | |
|-----|---|--|
| -/+ | <p>Engagement of a research mentor in actions of a scientific-didactic employee and the sufficient amount of time devoted to this engagement was evaluated positively by 54% and 53% respondents, respectively. On the other hand, satisfaction with the quality of the scientific support of the University is felt by less than 48% respondents.</p> <p>Despite the internal regulations (the Statute, the Resolutions of the Senate, Code of ethics for researchers) and scientific seminars conducted, employees emphasize insufficient merit-based and organisational support of supervisors for their scientific development. About 15% respondents expressed negative opinions, another group of about 30% expressed their uncertainty with regard to sufficient scientific support of supervisors offered to employees (inside or outside the University) and conscious and competent performance of this role.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Enhancement of regulations concerning organisation of seminars in the departments and faculties of GMU and merit-based support of supervisors and scientific mentors offered to subordinates pursuing successive scientific degrees. • Verification of the existing periodic appraisal procedures for Heads of departments, so that they take into account combination of this appraisal with scientific progress of their subordinates, fulfilment of commitments within organisational and merit-based support for scientific-didactic employees. |
|-----|---|--|

37. Supervision and managerial duties

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.

| | | |
|---|--|--|
| -/+ | <p>Despite the formal regulations operating in the University there is no mechanism of effective engagement of researchers with a large degree of autonomy R3 and R4 (who are not Heads) in scientific development of assistants and assistant professors as well as cooperation of these both groups in the projects reported by researchers with a large degree of autonomy. Insufficient support of senior members of staff is visible also with regard to possibilities of applying for publications of research results of the early-stage researchers in recognised national and international journals. In the University there are too few scientific mentors, who publish their works in the recognised journals and who are able to manage less experienced researchers within this area.</p> <p>In the open questions Heads of departments were clearly pointed to as researchers, from who such support is expected.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Undertaking actions by the authorities of the University aiming at introducing good practices in merit-based support of researchers with a large degree of autonomy from the department or the faculty for researchers at the early stage of the career, who write qualification papers and apply to publish their research results in the recognised journals. An example of such actions can be introduction of the obligation for researchers with a large degree of autonomy to participate in scientific seminars of the department and to hold formal consultations after or before such a seminar. • Stimulation of mechanisms for closer merit-based cooperation between researchers with a large degree of autonomy and researchers of the early-stage, forming effective research teams with the clearly established principles of work and evaluation of all members of such a team. |
| <p>38. Continuing Professional Development</p> <p>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.</p> | | |
| -/+ | <p>Despite the internal formal regulations staff point to problems in funding their participation in trainings that raise their qualifications (e.g. language). About 20% respondents evaluated negatively this possibility, and another 30% expressed their uncertainty.</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Development and realisation of the plan of trainings (including language training) for scientific-didactic |

| | | |
|---|---|---|
| | | <p>employees, supporting development of their scientific career.</p> <ul style="list-style-type: none"> • Introduction of the cyclic needs analysis with regard to trainings. |
| <p>39. Access to research training and continuous development 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.</p> | | |
| <p>-/+</p> | <p>Within the conducted survey a possibility to expand competences by participation in various forms of trainings financed by the University was evaluated on a low level. Less than 44% respondents positively evaluated this aspect of GMU actions. Simultaneously, only 37% employees positively evaluated adaptation of their conducted scientific activity to the current needs of the economic practice (organisations of different type).</p> | <p>Action required:</p> <ul style="list-style-type: none"> • Undertaking efforts to identify additional sources of funding for trainings enabling development of skills and qualifications on a continuous basis, as well as increasing their share in research and other types of actions (e.g. projects) corresponding to the needs of the economy • Updates on a regular basis of information about available resources taking into account their availability, researchers' interests and effectiveness of the overall system of trainings and development for researchers. |
| <p>40. Supervision 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.</p> | | |

| | | |
|-----|---|---|
| -/+ | Slightly above half of the surveyed positively evaluated scientific supervision organised by the University. Some employees do not feel that their scientific development is supervised by the researcher, who consciously assumed that role (only 60% positive answers) and has the right competences (only 64% positive answers). | <p>Action required:</p> <ul style="list-style-type: none"> • Development and implementation of the HR Strategy for Researchers that will enable creation of mechanisms for scientific support (scientific supervision) for assistants R1 and doctors R2. Within these mechanisms it is necessary to unambiguously appoint the mentor experienced in supervising research works, having time, knowledge and experience, competences and commitment. |
|-----|---|---|

During the works on the document of the Gap Analysis, some actions were introduced or undertaken in Gdynia Maritime University with regard to new internal regulations and new solutions of formal and technical character. These actions were aggregated in the table below.

Table 3. Implementation or commencement of GMU activities.

| No | Actions | Item No in the Gap Analysis |
|----|---|-----------------------------|
| 1 | Creation of the Department for Science and Cooperation with simultaneous expansion of competences of the University within support for initiation and realisation of scientific research works, monitoring and publicising information on mechanisms of research project funding, also competences connected with staff mobility and cooperation with socio-economic surroundings in search for business partners and performance of research for the needs of the economy. | 4, 8, 24, 26, 29, 31, 39 |
| 2 | Restructure of the GMU website, including expansion of the information on grants competitions for scientific research, on competences of research teams and scopes of research conducted in GMU. | 8, 39 |
| 3 | Introduction of the obligation to publicise timetables of scientific seminars organised by the faculties on their respective websites, which means also the obligation to plan scientific seminars in all the units of the faculty (departments). | 1, 37 |
| 4 | Implementation of the new system of support for publishing scientific works and funding participation of GMU staff and doctoral students in scientific conferences. The regulations introduced are: <ul style="list-style-type: none"> • The Regulations on subsidising participation of academic teachers and doctoral students of Gdynia Maritime University in scientific conferences of 21 December 2016 and the Ordinance of the Rector of GMU, No 1/17 of 2 January 2017 on amount of subsidies allocated to Gdynia Maritime University academic teachers and doctoral students for participation in scientific conferences. | 8 |
| 5 | Implementation of new internal regulations enabling the choice of a career path by the scientific-didactic employee. The regulations introduced are: <ul style="list-style-type: none"> • The Ordinance of the Rector 3-17 of 31 March 2017 on rotation procedures for academic teachers that have not obtained the scientific degree of a doctor with habilitation by the statutory defined date. | 21, 25, 28 |
| 6 | Standardisation of the system of employees' remuneration, especially at the early stage of a scientific career – R1 in order to make it more attractive. The regulations introduced are: <ul style="list-style-type: none"> • The Ordinance of the Rector 3-17 of 31 March 2017 on rotation procedures for academic teachers that have not obtained the scientific degree of a doctor with habilitation by the statutory defined date. • The Resolution on the change of the Annex to the Regulations on Remuneration. The Regulations on Remuneration for employees of Gdynia Maritime University, excluding crew members of the training vessels of 13 June 2017. • The Work Regulations of 28 September 2017 (in force from 1 November 2017). | 21, 22, 26, 28 |
| 7 | Launch of works on development and implementation of the Repository of Scientific Achievements (SED) of academic teachers in order to coordinate the initiation of new research projects and identification of research teams, as well monitoring engagement of employees in scientific research results. The regulations introduced are: <ul style="list-style-type: none"> • The Resolution No 5/17 of 6 February 2017 on collection, documentation, elaboration and dissemination of publishing achievements of employees, doctoral students and students of Gdynia Maritime University, and the Resolution No 4/17 of 6 February 2017 on the University Repository of Scientific Achievements (USEDN) of academic teachers, doctoral students and students of Gdynia Maritime University. | 1, 2, 25 |
| 8 | Development and implementation of new regulations on appraisal of scientific-didactic workers and new regulations on awarding bonuses and rewards. The regulations introduced are: | 11, 25 |

| | | |
|----|--|-----------------------|
| | <ul style="list-style-type: none"> The Resolution No 33/17 of 23 October 2017 on conducting periodic appraisal of academic teachers for the academic years 2014/2015, 2015/2016, 2016/2017, 2017/2018. | |
| 9 | Realisation of the purchasing actions of new equipment for research laboratories within the iMEN project– termination of the project realisation is planned for June 2018. | 23 |
| 10 | Elaboration and submission of the application to the national programme PO WER, which plans organisation of trainings supporting staff competences R1-R4, including support within staff mobility. | 1, 3, 4, 5, 7, 29, 39 |
| 11 | Elaboration and submission of the application to the Ministry of Science and Higher Education to obtain funding for two projects – creation of “the Internet of Things” laboratory and design of the platform supporting development of scientific research in the cloud surrounding and implementation of the system streamlining the University management. | 23 |
| 12 | <p>Actions with regard to enhancement of working conditions:</p> <ul style="list-style-type: none"> Implementation of the University programme enabling GMU staff and their family members to participate in the programme MultiSport Card. Preparation of the offer for GMU staff to access the extended health care system. Launch of free-of-charge sports classes. Introduction of regular organisation of the sport festival into the GMU calendar. Adoption of the Framework Repair Plan – including preparation of space for research as well as social space on the basis of the Resolution of the GMU Senate. | 24 |
| 13 | <p>Implementation of new regulations on working practices in Gdynia Maritime University. The regulations introduced are:</p> <ul style="list-style-type: none"> The Work Regulations of 28 September 2017(in force from 1 November 2017), including regulations on possibilities of part-time work, tele-working and flexible working hours. | 24 |
| 14 | Modernisation of the GMU website presenting offers of mobility of scientific-didactic staff. | 29 |
| 15 | <p>Development and publication of the GMU information materials on offers of cooperation within scientific research:</p> <ul style="list-style-type: none"> Cooperation with entrepreneurs: http://www.am.gdynia.pl/wspolpraca-z-przedsiębiorcami Offer for business: http://www.am.gdynia.pl/oferta-dla-biznesu <p>Including preparation of the information brochure on the GMU research and development offer (http://www.am.gdynia.pl/sites/default/files/zalaczniki/amgofertabr.pdf)</p> | 31 |
| 16 | Initiation of changes in the internal regulations enabling funding the processes of commercialisation of research results (the Resolution No 25/17 of 24 August 2017 on the amount and division of indirect costs calculated for projects realised in Gdynia Maritime University). | 31 |
| 17 | Development and implementation of the Regulations on Remuneration for employees of Gdynia Maritime University, excluding crew members of the training vessels of 13 June 2017, which regulates the issue of remuneration for realised hours of didactic and scientific work. | 33 |
| 18 | Development and implementation of the new Work Regulations and the Regulations on awarding bonuses and Rector rewards for scientific-didactic employees, which take into account mentor supervision and the process of teaching of GMU staff at the early stage of their career. | 8, 33 |

Table 4. Analysis regarding OTM-R.

| OTM-R checklist | | | | | |
|--|-------------|--------------------------|-------------------------|---|---|
| | 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 | -- | To be introduced in 2018 |
| 2. Do we have an internal guide setting out clear OTM-R procedures and practices for all types of positions? | x | x | x | -/+ | Procedures covered by the OTM-R are introduced within the ISO Procedure P-5 (human resources management) and the Statute of GMU. The procedure goes in line with the Labour Law stating that a researcher can undergo an interview procedures one time when applying for the post. The new regulation of the Law claims no impact of position changing while promoting or degrading, or gaps in the employment. |
| 3. Is everyone involved in the process sufficiently trained in the area of OTM-R? | x | x | x | -/+ | Existence of training programmes for OTM-R. Number staff following training in OTMR. When referred to the ISO procedures there is a group of trained persons. During the update of ISO procedures, there will be further training programmes scheduled. |
| 4. Do we make (sufficient) use of e-recruitment tools? | x | x | | +/- | Existence of training programmes for OTM-R. Number of staff following training in OTM-R. A job opportunity is published on the GMU website and international EURAXESS. Applications sent by email are accepted. http://bip.am.gdynia.pl/praca |
| 5. Do we have a quality control system for OTM-R in place? | x | x | x | ++ | ISO – P-5 procedure |

| | | | | | |
|---|---|---|---|-----|---|
| 6. Does our current OTM-R policy encourage external candidates to apply? | x | x | x | ++ | Relatively high number of applicants are external. A job opportunity is published on the GMU website and international EURAXESS |
| 7. Is our current OTM-R policy in line with policies to attract researchers from abroad? | x | x | x | +/- | When looking for a researcher from abroad the advertisements are published on Euraxess and spread among foreign partner institutions. |
| 8. Is our current OTM-R policy in line with policies to attract underrepresented groups? | x | x | x | ++ | There are no underrepresented groups defined. An exception concerns applicants that have a diploma permitting work on the ships. |
| 9. Is our current OTM-R policy in line with policies to provide attractive working conditions for researchers? | x | x | x | -/+ | The numbers change depending of the current labour market. A relative % of external applicants. Social benefits are available, e.g. medical bonus programme, sport programme. |
| 10. Do we have means to monitor whether the most suitable researchers apply? | | | | ++ | Results of the recruitment process. |
| Advertising and application phase | | | | | |
| 11. Do we have clear guidelines or templates (e.g., EURAXESS) for advertising positions? | x | x | | ++ | Guidelines and procedures concerning advertising of positions are coherent with the Act of Law on Higher Education, GMU Statute and ISO Procedure P-5 (human resources management). |
| 12. Do we include in the job advertisement references/links to all the elements foreseen in the relevant section of the toolkit? [<i>see Chapter 4.4.1 a) of the OTM-R expert report¹</i>] | x | x | | -/+ | To be introduced in 2018. |
| 13. Do we make full use of EURAXESS to ensure our research vacancies reach a wider audience? | x | x | | ++ | GMU advertisements are published on Euraxess. |
| 14. Do we make use of other job advertising tools? | x | x | | ++ | Results of recruitment process. |
| 15. Do we keep the administrative burden to a minimum for the candidate? [<i>see Chapter 4.4.1 b) ⁴⁵</i>] | x | | | ++ | Number and length of required documents are reduced to minimum. |
| Selection and evaluation phase | | | | | |
| 16. Do we have clear rules governing the appointment of selection committees? [<i>see Chapter 4.4.2 a) ⁴⁵</i>] | | x | x | ++ | Statistics on the composition of panels. |

| | | | | | |
|--|--|---|---|-----|---|
| 17. Do we have clear rules concerning the composition of selection committees? | | x | x | ++ | ISO P-5 procedure and GMU Statute. |
| 18. Are the committees sufficiently gender-balanced? | | x | x | +/- | The committees are not gender-balanced sometimes due to the type of career path which lies strictly within male scope of interest. The job opportunity is fully available for female applicants. |
| 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 | ++ | ISO P-5 procedure and GMU Statute. |
| Appointment phase | | | | | |
| 20. Do we inform all applicants at the end of the selection process? | | x | | +/- | Only the selected candidates are informed about the selection results. Relevant information is included in the position advertisement. |
| 21. Do we provide adequate feedback to interviewees? | | x | | +/- | Interviews are not carried out in every case. Some applications and CVs are sufficient for selection. Interviewees can obtain the feedback from their job interview on demand. |
| 22. Do we have an appropriate complaints mechanism in place? | | x | | ++ | Statistics on complaints. |
| Overall assessment | | | | | |
| 23. Do we have a system in place to assess whether OTM-R delivers on its objectives? | | | | +/- | The ISO system delivers the objectives in a way of internal and external auditing processes. However some improvements and modifications are planned to be introduced along with the HR Strategy. |

4. ACTION PLAN

Information about the organisation

- Name of Organisation under review: Akademia Morska w Gdyni
- Organisation's contact details: address: ul. Morska 81-87, 81-225 Gdynia, Poland
- Email: pror1@am.gdynia.pl (Vice Rector), ph.: +48-58-558-64-27
- Web link to published version of organisation's HR Strategy and Action Plan:
http://www.am.gdynia.pl/en/sites/am.gdynia.pl.en/files/PL%20GMU_HR_Strategy.pdf#overlay-context=logoHR

SUBMISSION DATE: 18TH DECEMBER 2017

a. Organisational information

Table 5. Number of students, employees and funds allocated to financing scientific research.

| STAFF & STUDENTS | FTE |
|---|-------------------------|
| <i>Total researchers = staff, fellowship holders, bursary holders, PhD. students either full-time or part-time involved in research</i> | 33 +48 PHD students |
| <i>Of whom are international (i.e. foreign nationality)</i> | 3 |
| <i>Of whom are externally funded (i.e. for whom the organisation is host organisation)</i> | No relevant data |
| <i>Of whom are women</i> | 123 +27 PhD students |
| <i>Of whom are stage R3 or R4 = Researchers with a large degree of autonomy, typically holding the status of Principal Investigator or Professor.</i> | 23 |

| | |
|---|--------------|
| <i>Of whom are stage R2 = in most organisations corresponding with postdoctoral level</i> | 47 |
| <i>Of whom are stage R1 = in most organisations corresponding with doctoral level</i> | 146 |
| <i>Total number of students (if relevant)</i> | 5521 |
| <i>Total number of staff (including management, administrative, teaching and research staff)</i> | 749 |
| RESEARCH FUNDING (figures for most recent fiscal year) | € |
| <i>Total annual organisational budget</i> | 1.031.730,72 |
| <i>Annual organisational direct government funding (designated for research)</i> | 733.517,83 |
| <i>Annual competitive government-sourced funding (designated for research, obtained in competition with other organisations – including EU funding)</i> | 210.804,48 |
| <i>Annual funding from private, non-government sources, designated for research</i> | 87.408,41 |
| ORGANISATIONAL PROFILE (a very brief description of your organisation, max. 100 words) | |
| <i>Description provided in Introduction.</i> | |

b. Planned actions

On the basis of the above analysis the authorities of Gdynia Maritime University made a decision to undertake corrective/enhancement actions in the following areas.

The abbreviations used in the table:

R – the level of Rector

RN – the level of Vice Rector for Research and International Cooperation

RK – the level Vice Rector for Education

RM – the level of Vice Rector for Maritime Affairs

ROP – the Organisational-Legal Department

Table 6. Planned activities.

| Action No | Action Plan | Reference points from the Gap Analysis | Responsible unit | Performance time |
|-----------|---|--|-------------------------------------|--|
| Z.1. | <ul style="list-style-type: none"> • Development and realisation of cyclical trainings that will expand competences of scientific-didactic employees, including: <ul style="list-style-type: none"> - information meetings on availability of grants competitions for scientific works - specialist language training - trainings on data protection and security - trainings on intellectual property protection and research • Publicising information on organisation of trainings for researchers. | 2, 3, 4, 5, 7, 36, 37, 38, 39, 40 | RN in cooperation with faculties | On a continuous basis, at least once a quarter |
| Z.2. | <ul style="list-style-type: none"> • Update of the internal regulations and procedures relating to realisation of research projects funded from external sources. • Update of the internal regulations and procedures relating to realisation of scientific research projects and financial resources spent on scientific activity and maintenance of research potential. | 4, 8 | RN | March 2018 |
| Z.3. | <ul style="list-style-type: none"> • Modernisation of the information structure on the website of GMU with regard to functionality connected with access to information on good practices in the area of research, intellectual property protection and access to the regulations on ethics of researcher's work. | 2, 3, 4, 5, 8 | RN and ROP in | Modernisation of information |

| | | | | |
|-------|--|------------------------------------|-----------------------------------|---|
| | <ul style="list-style-type: none"> Modernisation of the information structure of the faculties' websites in order to ensure access to information on current grants competitions for research and regular updates of the competitions database. | | cooperation with faculties | structure – September 2018. Regular updates of information. |
| Z.4. | <ul style="list-style-type: none"> Creating a new job position or an organisational unit having enhanced competences within intellectual property rights and research commercialisation. | 3, 31 | R | June 2019 |
| Z.5. | <ul style="list-style-type: none"> Development and implementation of new principles and criteria in appraisal of employees' didactic activity made by students. | 11 | RK in cooperation with faculties | December 2018 |
| Z.6. | <ul style="list-style-type: none"> Enhancement of the recruitment procedure by developing uniform procedures and introducing regulations on selection of employees for scientific and didactic-scientific positions, among others: <ul style="list-style-type: none"> - job advertisements templates (advertisements form, description of position and working conditions, entitlements, development prospects, planned duration of employment) - composition of the faculty selection committees - criteria for candidate evaluation | 12, 13, 14, 15, 16, 17, 18, 19, 20 | R in cooperation with faculties | June 2018 |
| Z.7. | <ul style="list-style-type: none"> Enhancement and regular updates of the offer of mobility of researchers. | 29 | RN | Regular updates of information. |
| Z.8. | <ul style="list-style-type: none"> Enhancement of internal mechanisms and regulations in the system of resolving conflicts and disputes by the procedure enabling confidential and informal assistance in resolving conflicts. | 34 | Faculties in cooperation with ROP | March 2019 |
| Z.9. | <ul style="list-style-type: none"> Expansion of competences of the Career Office: professional advice for scientific-didactic employees and doctoral students. | 30 | RM in cooperation with faculties | September 2018 |
| Z.10. | <ul style="list-style-type: none"> Development and introduction of good practices of merit-based support by researchers with a greater level of autonomy (R3, R4) for researchers with no autonomy (R1, R2) in the form of consultations, participation in department or faculty seminars | 36, 37, 38, 40 | Faculties | On a continuous basis |

An overview of the organisation in terms of the current strengths and weaknesses of the current policy and practice under the four thematic headings of the Charter and Code at your organization.

Table 7. Strengths and weaknesses in the four analyzed areas.

| Strengths | Weaknesses |
|---|--|
| <i>Ethical and professional aspects</i> | |
| Research freedom Professional responsibility Professional attitude Contractual and legal obligations Accountability Good practice in research Public engagement Non discrimination Evaluation/appraisal system Recruitment Selection Transparency Judging merit Variations in chronological order of CVs Seniority Postdoctoral appointments | Ethical principles Dissemination, exploitation of results Recognition of mobility experience Recognition of qualifications |
| <i>Working conditions and social security</i> | |
| Recognition of profession Research environment Working conditions Stability of employment Funding and salaries Gender balance Teaching Complaints/appeals Participation in decision-making bodies | Career development Value of mobility Access to career advice Intellectual property rights Co-authorship |
| <i>Training and development</i> | |
| | Relation with supervisors Supervision and managerial duties Continuing professional development Access to research training and continuous development Supervision |
| <i>OTM-R</i> | |
| OTM-R system recognised as ISO system Advertising and application phase Selection and evaluation phase | Appointment phase |

In the area of Open, Transparent and Merit-Based Recruitment, GMU has adopted the ISO P5-4 procedure referring to HR management. This procedure has been reviewed in the process of gap analysis and will be revised to develop and implement the OTMR principles. This has been indicated in Task Z.6. Special stress will be put on advertisement and composition of selection committees depending on the career profile of candidates (R1-R4)

c. Monitoring the implementation of actions

The implementation process of improvement and corrective actions has already started not only as a result of a detailed analysis of the existing situation, but also due to a change in the model of management of the University initiated in 2016. An additional stimulus that defines the trend of changes in compliance with the Charter and the Code is the newly prepared law on higher education determining the ways higher education institutions in Poland are to operate, which are in line with the best models of the UE countries.

Further steps to effectively perform actions in the areas requiring improvement/enhancement or correction has led to formal appointment of the team monitoring implementation of the projected improvements. The appointed team is composed of representatives of all the groups of scientific-didactic employees and doctoral students. The team will realise monitoring actions through regular meetings and according to the developed schedule for actions performance. It is planned that monitoring of implementation of the actions will be realised in the form of regular analyses and the survey.

<http://bip.am.gdynia.pl/sites/default/files/zalaczniki/scan0009.pdf>

The introductory meeting took place on 29th November 2017 and the Team consists of Deputy Rectors, Chancellor, Vice Deans of GMU Faculties, representatives of Organisational-Legal Department, HR Department and of Doctoral students.



Photo 7. Meeting of a Team for monitoring the implementation of actions (photo: I. Bednarska, GMU)

The projected changes laid down in the present HR Strategy have won in the course of the so far realised actions general acceptance of the university community, which constitutes thereby the obligation to implement them in the near future.

The HR Strategy is correlated with the adopted Development Strategy for Gdynia Maritime University for the years 2016-2020.