





**MARINE RESEARCH IN GERMANY**

CAO Integration Meeting - April 17<sup>th</sup> 2018  
Lydia Gustavs, Project Management Jülich



**OVERVIEW**


- › Federal Ministry of Education and Research - Structure and Responsibilities
- › The role of Project Management Jülich
- › Present and Future of Marine Research in Germany
- › MARE:N –Marine Research for sustainability → „evidence-based policy making“
- › FAQs about project start and implementation

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**Responsibilities of the BMBF**

Federal Ministry of Education and Research



Framework Programme „Research for Sustainable Development“ (FONA<sup>3</sup>)  
German Federal Ministry of Education and Research

Federal Ministry for the Environment, Natural Conservation, Building and Nuclear Safety

Federal Ministry for Economic Cooperation and Development

COP 21 PARIS | 30.11. - 11.12.2015  
**BELOW 2°C – TOGETHER WE'LL MAKE IT!**

Strategy for International cooperations

**THE NEW HIGH-TECH STRATEGY**  
Innovations for Germany

**FONA**  
Research for Sustainable Development  
BMBF

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**Implementation of the framework program FONA**

Federal Ministry of Education and Research

**FONA**  
Research for Sustainable Development  
BMBF

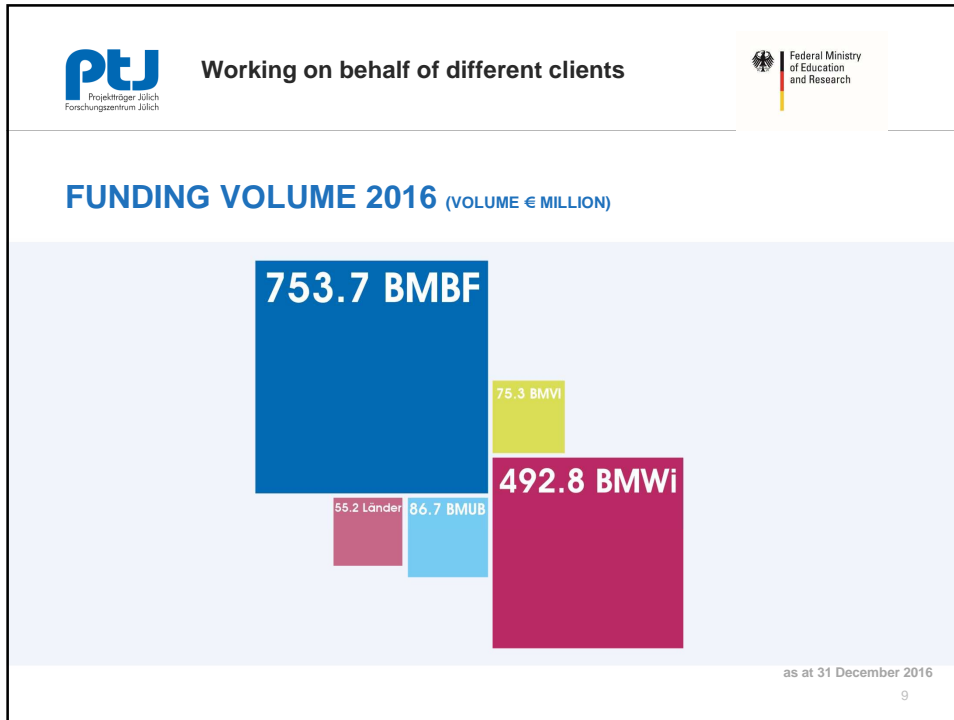
Flagship Initiatives: Energiewende, Green Economy, The Future City  
Biodiversity – Geosciences – Society – Climate – Land Management  
[Marine and Polar Research](#) – Resource Efficiency – Sustainable Water Management

BMBF Department 72 „**Sustainability, Climate, Energy**“ is mainly responsible for funding research and development projects in the field of **basic research**:

- Division 721: Policy Issues Sustainability
- Division 722: Basic Energy Research
- Division 723: Global Change
- Division 724: Resources and Sustainability
- Division 725: System Earth → Marine and Coastal Research







**Expertise for interdisciplinary research**

**MGS – Marine Research, Geosciences, Ship and Marine Technology**  
 (on behalf of the Ministry of Education and Research and the Ministry of Economic Affairs and Energy)

MARE-N – Coastal, Marine and Polar Research for Sustainability  
 German Federal Government Research Program

GEO:N – Geoforschung für Nachhaltigkeit  
 Fachprogramm im Rahmenprogramm „Forschung für Nachhaltige Entwicklung (FONUE)“

Status quo Maritime Technologien  
 Tagungsband der Status quo 2016  
 Schriftreihe Projektträger Jülich

**Marine Scientists – Geologists - Engineers**

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**Expertise for the German research fleet**



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and Research

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**Exploring the Secrets of the Deep Sea**  
The Research Vessel SONNE in the Service of German Marine Science




**RV Polarstern II - First Design Study**  
Commissioning planned in 2020/2021

**RV SONNE**  
multipurpose working platform for all marine research disciplines, mainly operating in the Pacific and the Indian Ocean.



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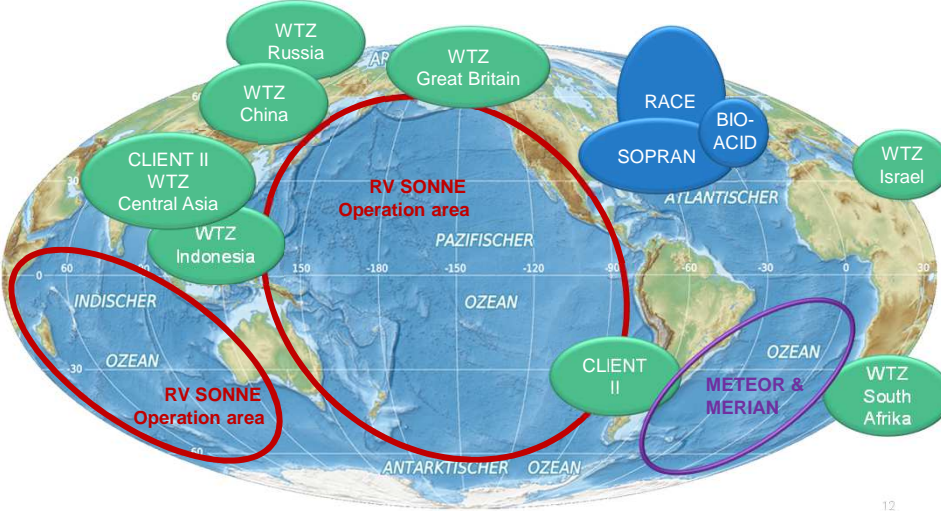
**Recent programs and initiatives**



Federal Ministry  
of Education  
and Research

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**Bilateral Cooperation in Science and Technology (WTZ)**



The map displays global bilateral cooperation in science and technology (WTZ) initiatives. Key features include:

- RV SONNE Operation areas:** Indicated by red circles in the Pacific and Indian Oceans.
- Other WTZ Initiatives:** Russia, China, Great Britain, Israel, South Africa, and various regions in Asia and Europe.
- Other Programs:** RACE, SOPRAN, BIO-ACID, CLIENT II, METEOR & MERIAN.

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Future developments in MARE:N

Federal Ministry of Education and Research

**MARE:N – Coastal, Marine and Polar Research for Sustainability**

COASTAL REGIONS	MARINE REGIONS	POLAR REGIONS
	Global Change and Climatic Events	
	Ecosystem Function and Biodiversity	
	Global Biogeochemical Cycles and Energy Fluxes	
	Management of Natural Hazards	
	Sustainable Use of Resources	
	Governance and Participation	
		
Research Infrastructure Measurement and Observation Technology – Information and Data Structures		
Innovative Technologies		

Call 2017

**„Consequences of climate change for coastal upwelling systems“**

- 3 projects starting soon
- regional and thematic differentiation, but also synergistic research intended

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MARE:N - Marine Research for Sustainability

Federal Ministry of Education and Research

- Implementation of Mare:N through dedicated Research Calls, developed by a consultation process **(10/2017)**

- Consultation of scientists
- Dialogue with various stakeholder groups

→ Development of a „White Paper“

- Marine Resources
- Ocean Dynamics
- Multiple Stressors
- Marine Hazards

→ publication of the Mare:N call 2018 (addressing topics discussed in the white paper)



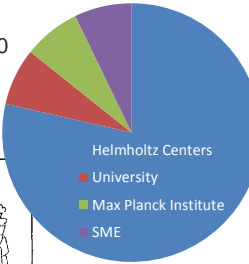
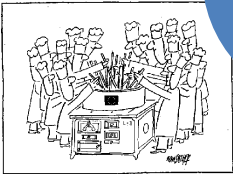
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**General timeline and particular situation**

Federal Ministry of Education and Research

**Question No 1: Why does it take so long (and seems so complicated?)**

- Helmholtz centers (AWI, HZG, GEOMAR) are financed on a 90:10 ratio by the Federal Ministry and the German Länder
  - BMBF pays particular attention to third party funding
- 3 parties are involved in the funding decision
  - PtJ-MGS
  - controlling
  - BMBF
- Coalition talks 2017/ 18 have been time-consuming and resulted in a late government formation
  - provisional budget planning further complicates the timing

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**Thanks for your attention**  
& looking forward to your project presentations

(& to answer further questions during the afternoon FAQ session)

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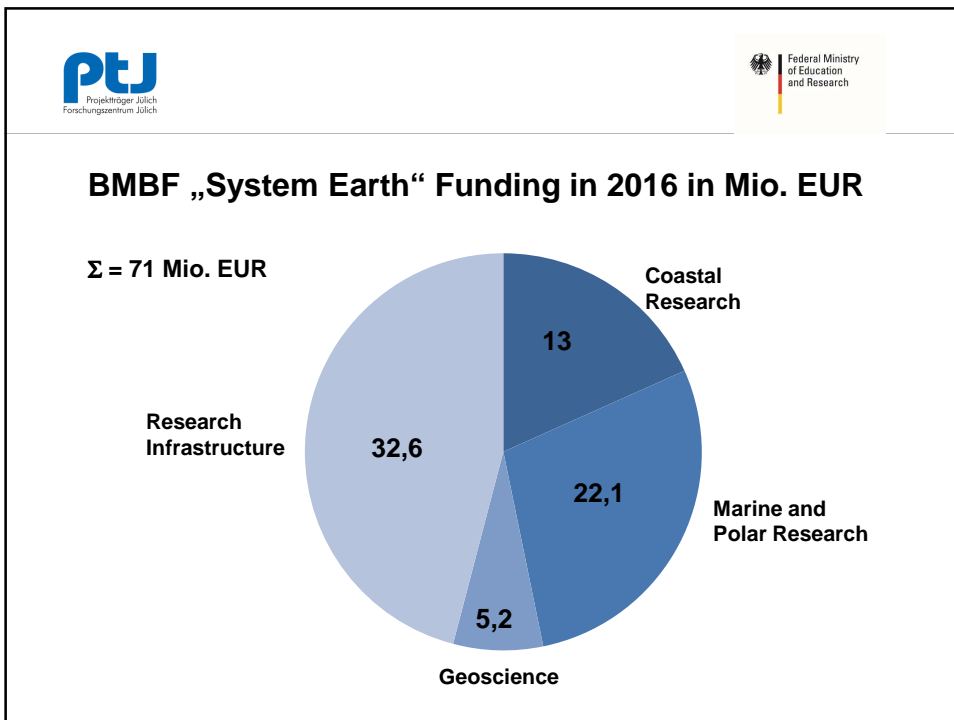
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Federal Ministry  
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and Research

23.04.2018

Name der Präsentation / Referent, Geschäftsbereich

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## GERMAN INTERESTS IN ARCTIC RESEARCH


- Not an Arctic nation, but operates one of the world's largest Arctic research programs
- Science and environmental protection are at the center of Germany's approach to engaging with Arctic nation
- Arctic research program informs policies about the consequences of climate change in the Arctic
- and on sustainability and resilience at the national and international level




Rapid Climate Change in the Arctic  
Peer Review for Global Sustainability




Guidelines of the  
Germany Arctic policy  
Arctic Council Working Paper 2017/01




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The International Arctic  
Drift Expedition




## MULTIDISCIPLINARY DRIFTING OBSERVATORY FOR THE STUDY OF ARCTIC CLIMATE



- First year-round expedition into the central Arctic
- Total budget exceeding 60 Million €
- Under the umbrella of IASC, led by AWI



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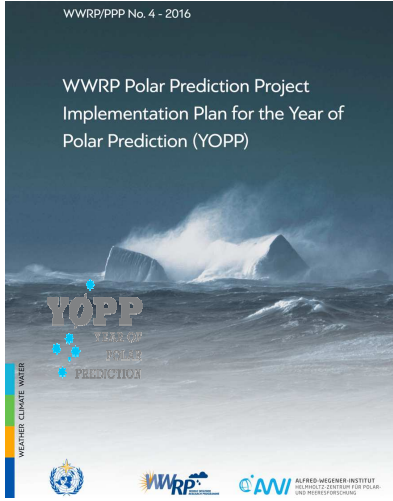


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## YEAR OF POLAR PREDICTION

➤ **Mission:** Enable a significant improvement in weather and environmental prediction capabilities for the polar regions and beyond, by coordinating a period of intensive observing, modelling, verification, user-engagement and education activities.

- Under the auspices of WMO (2013 – 2022)
- Internat. Coordination Office at AWI



WWRP/PPP No. 4 - 2016

WWRP Polar Prediction Project  
Implementation Plan for the Year of  
Polar Prediction (YOPP)

WMO  
YOPP  
YEAR OF  
POLAR  
PREDICTION

WEATHER CLIMATE WATER

AWI ALFRED WEGENER-INSTITUT FÜR HOCHSEE-UND POLAR- UND MEERESFORSCHUNG



Ministry of  
Education  
and Culture

Projektträger Jülich  
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European  
Commission



Bundesministerium  
für Bildung  
und Forschung



Federal Ministry  
of Education  
and Research

Arctic Science Forum, 25. Oktober 2018

- BMBF, Berlin (Alexander von Humboldt-Saal)

Evening reception, 25. Oktober 2018

- Museum für Naturkunde, 25.10.2018

Arctic Science Ministerial, 26. Oktober 2018

- Axica – Convention Center, 26.10.2018



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graph TD
    A[Arctic Science Forum] --> B[Evening Reception]
    B --> C[Arctic Science Ministerial]
    
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