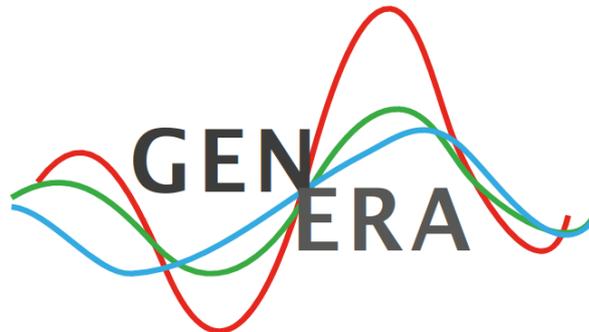


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**Gender Equality Network in the European Research Area  
Performing in Physics**

**Deliverable D 3.3  
Final evaluation report (ex-post)**

**August 2018**

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<b>Task 3.2</b>	Assessment of gender equality in participating research organizations
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### Deliverable D3.3 – Final evaluation report (ex-post)

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## 1. Summary

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This final evaluation report presents the learnings we identified as Critical Friend in the accompanying evaluation of the GEP implementation activities by 11 GENERA partner organisations.

This report describes our methodological approach (chapter 2). As already argued in the ex-ante report, our focus was on the phase of negotiating a Gender Equality Plan (GEP) within the various GENERA partner organisations. As this phase was more time-consuming than expected, challenges and learnings could be intensified mainly in this phase. For this reason, there was no or only very little time for the implementation of the planned measures beyond the implementation / signature of a GEP. However, the signing of the GEP can in itself be seen as a very important milestone in the implementation process.

We discuss here the specific challenges in the field of physics, which was highly represented in the GENERA partnership. The field can be characterised as one of low gender awareness, with most partner organisations being at a 'starting' point in relation to engaging in activities for structural change. This refers to procedures for change as well as to gender knowledge, both convene in the function of the implementation manager as agent for change. Further, the GEP is discussed as a policy instrument to foster structural change processes in research organisations and ideas how to improve this policy instrument are presented.

The general findings and learnings (chapter 3) are based on 11 Case studies which are presented - in alphabetic order - from chapter 4 to chapter 14. Therefore interviews were conducted in each partner organisation with members of the management, members of the GENERA team, and partly with relevant stakeholders. Chapter 15 sums up the most relevant general findings, covering all partners.

In the Annex, the previously prepared reports are listed along the accompanying evaluation, starting with an overview of the ex-ante report (chapter 16), while the full reports of the interims-online questionnaires are added in Annex 2: The analysis of Evaluation sheet 1 can be found in chapter 17.1 and the report on Evaluation sheet 2 is in chapter 17.2.

## 2. Methodology

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As outlined in the GENERA evaluation concept the objective of the accompanying evaluation was the assessment of the implementation process and the applied practices of the GENERA team members. It was designed in a way to provide early feedback for the relevant actors in order to support the implementation of their GEPs. Furthermore, the evaluation aimed at providing a learning environment and sharing experiences between the GENERA partners. Starting with an ex-ante assessment the status quo before GENERA was evaluated in order to draw conclusions on the impact of the project as they will be discussed in the underlying ex-post report. During the project runtime, two interim evaluation reports showed the progress in the partner organisations. Also, a monitoring tool (monitoring tree) was developed to enable partners to measure gender equality progress, even after GENERA.

This chapter shall first give an updated outline of the evaluation approach used by JOANNEUM RESEARCH (JR) as the evaluation partner, then provide a short summary of the two interim evaluation sheets and finally discuss in more detail the design of the monitoring tree.

### 2.1. Evaluation approach

The GENERA evaluation approach consisted of a concept and design analysis on the one hand (ex-ante evaluation) and an implementation analysis on the other (ex-post evaluation). As described in the evaluation concept (D3.1), the concept and design analysis was outlined to assess whether the defined measures fit the respective goals as they were set by the partner organisations.

Yet, in the ex-ante phase it became obvious that this plan could not be realised, because not enough Gender Equality Plans (GEPs) or measures would be fully implemented during the project. This is why we adopted our evaluation approach and became Critical Friend of the implementation managers (IMs). This approach (Balthasar 2012, see D3.1) includes facilitating learning by providing timely feedback, advice and (external) expertise in order to establish a trustful relationship which enables learning. The approach applies to the GENERA team as well as the management of ROs. The overall aim of the Critical Friend is to provide support for starters and to learn for additional policy design (for more findings on policy design see also D6.2 GENERA Policy Briefs).

Furthermore, we found out that the phase of designing the GEPs is crucial to understand. Why does it take so long? What are the challenges? What resistances can already be found here?

Still, the analyses were based on personal interviews with members of the GENERA implementation teams and other policy actors, stakeholders and research staff within each institution as well as the conducted online surveys. Furthermore, the implementation analysis made use of the information provided by the implementation reports produced in WP4 and self-reporting forms filled out by each implementing partner.

### 2.2. Evaluation sheets 1 and 2

The two interim evaluations were based on online-questionnaires sent out to the partner organisations. The first interim-questionnaire was sent to all implementation managers (IMs) in June 2017 and reflected the status quo of GENERA implementation process by the end of May (month 21 of 36 of the project runtime). An online questionnaire was sent to all IMs (in MPG it was sent to 3 IMs

as three institutes were involved), asking for an assessment of the status and content of the GEP, the implementation process as well as support needed for further progress. The JR evaluation team assessed the status quo based on these questionnaires and added recommendations taking on the role of a critical friend. After finishing the analysis, the draft versions of the partner profiles were sent to the respective partner for feedback. Teams could comment and add facts that were missing.

What the first evaluation sheet<sup>1</sup> has shown is that the process of how to design a GEP was still unclear in some partner organisations, data collection had not been finished and support from management was lacking. Hence the progress from the ex-ante assessment to the first evaluation a few months later was rather limited in most partner organisations. The goal of the GENERA partners was to come up with GEPs that were specifically tailored for their organisation to meet their respective needs. However, the openness concerning the content and implementation process caused delays in the project due to uncertainty about where attention should be focused. Some of the biggest challenges included questions concerning the necessary data, defining the focus and respective measures, as well as allocating responsibilities. Furthermore, time pressure was commonly mentioned as a big hindering factor.

The evaluation team concluded from the results of the first interim-questionnaire that the partners need further guidance in how to get the implementation process started. Therefore, it was recommended that the observed challenges should be discussed in the consortium and that common strategies need to be found. The first interim report provided an overview of the observed challenges and addressed these with recommendations, first in general terms and then specifically for each partner organisation.

The second interim-questionnaire<sup>2</sup> targeted the leadership of the partner organisation teams. It was conducted in January 2018 to evaluate the progress until December 2017 (month 28). The content of the online-questionnaire was similar to that of the first evaluation but also focused on organisational changes that already became visible, the measures that were already implemented and what was still planned for the remaining project runtime. The second interim evaluation showed that at that point in the project, only 5 out of the 11 GEP implementing organisations have achieved an agreed upon and signed commitment to implementing a GEP. However, progress was nonetheless visible overall. As already stated above, many organisations mentioned that management support could be improved and that the data collection turned out to be a big support factor. Furthermore, many partners were able to provide a whole list of targets and measures to be implemented and some have already started the implementation process. Yet, it has to be highlighted that some organisations, such as those from Germany, already had a GEP implemented prior to the GENERA project and therefore had more experience. While some success could be shown there were still many challenges. For example, internal resistance or a lack of interest was repeatedly reported by both men and women within the evaluated organisations. Hence, it was still a struggle for some of the partners to include the relevant stakeholders in the process and to raise awareness within their organisation. Also the time factor still played a big role with many of the partners arguing that the project runtime is too short in order to develop and implement a GEP. Nonetheless, the organisations still planned on implementing further measures before the end of the project.

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<sup>1</sup> See Appendix 2 for the detailed interim evaluation reports.

<sup>2</sup> See Appendix 2 for the detailed interim evaluation reports.

### 2.3. Expost-Interviews

This part of the report focuses on the final stage of the evaluation process, namely the implementation analysis, which aims at assessing the institutional progress and cultural change. The results are based on 70 semi-structured interviews conducted by the JR evaluation team. The interviews were conducted in April and May 2018, in most part as face-to-face interviews and partly via Skype or telephone, if personal meetings were not possible. Throughout the project it became clear that the interviews not only had the function to gather data but also supported the processes within the partner organisations by providing a signal that gender in physics is on the European agenda and gave those involved the chance to talk about existing issues.

All interviews were transcribed and analysed, using MAXQDA for basic coding, while deductive and inductive coding was mainly done manually, reading and re-reading basic coding and transcripts. In this report quotes are used to illustrate the individual situation within the partner organisations. However, note that these quotes reflect the subjective perceptions of interviewees that sometimes differ from facts or realities. Table 1 provides an overview of the number and types of interview partners per partner organisation. The target group of the ex-post evaluation were the implementation managers (IMs).

**Table 1: Overview ex-post interviewees by partner organization**

	All		Management		HR		Gender Equality Officer		Others*		GENERA** Team Member	
	F	M	F	M	F	M	F	M	F	M	F	M
CNR	2	1	-	-	-	-	1	-	-	-	1	1
CNRS	5	3	1	2	-	-	1	1	1	-	2	-
DESY	5	2	1	1	1	-	1	-	-	-	2	1
Geneva	5	-	-	-	1	-	2	-	-	-	2	-
IAC	5	3	-	2	-	1	2	-	1	-	2	-
IFIN-HH	3	1	-	-	-	-	1	-	1	-	1	1
INFN	3	5	2	4	-	-	-	-	-	-	1	1
JU	5	1	1	1	-	-	-	-	2	-	2	-
KIT	6	-	1	-	-	-	1	-	1	-	3	-
MPG	5	1	-	-	-	-	4	-	-	-	1	1
NOW-I	5	4	2	4	-	-	-	-	1	-	2	-
<b>Total</b>	<b>49</b>	<b>21</b>	<b>8</b>	<b>14</b>	<b>2</b>	<b>1</b>	<b>13</b>	<b>1</b>	<b>7</b>	<b>-</b>	<b>19</b>	<b>5</b>
	<b>70</b>		<b>22</b>		<b>3</b>		<b>14</b>		<b>7</b>		<b>24</b>	

\* = researchers, gender experts, former management staff, policy makers

\*\* = all interviewees who are GENERA team members are listed here and not in another function that they might also cover, e.g. Gender Equality Officer or HR manager

To protect anonymity, the quotes from the interviews are only coded with numbers, like IP99, but give no further information.

## 2.4. GENERA PAM (Planning – Action – Monitoring ) tool

Concerning GEPs and gender equality measures, many potential target organizations were able to identify a variety of different measures as potentially implementable. To help manage the structural complexity of the implementation activities, the evaluation team developed the GENERA planning, action and monitoring tool, which links measures and targets. The tool, developed throughout the accompanied evaluation process, consolidates experiences and expertise acquired throughout the project runtime. The development of the tool was aligned with the needs of the IMs and the RO management, in order to provide orientation, systematization, and causalities - crucial in the field of physics where awareness of gender issues is low and systematic problem solving styles are part of the culture. In order to additionally meet the understandings of the research field, the planning, action and monitoring tool was specifically conceptualised for physics and serves as guidance in the GEP design process - from the first idea to the final GEP.

The following diagram illustrates the development of the monitoring tree as outcome of the accompanying evaluation as Critical Friend who provides immediate support when needed.

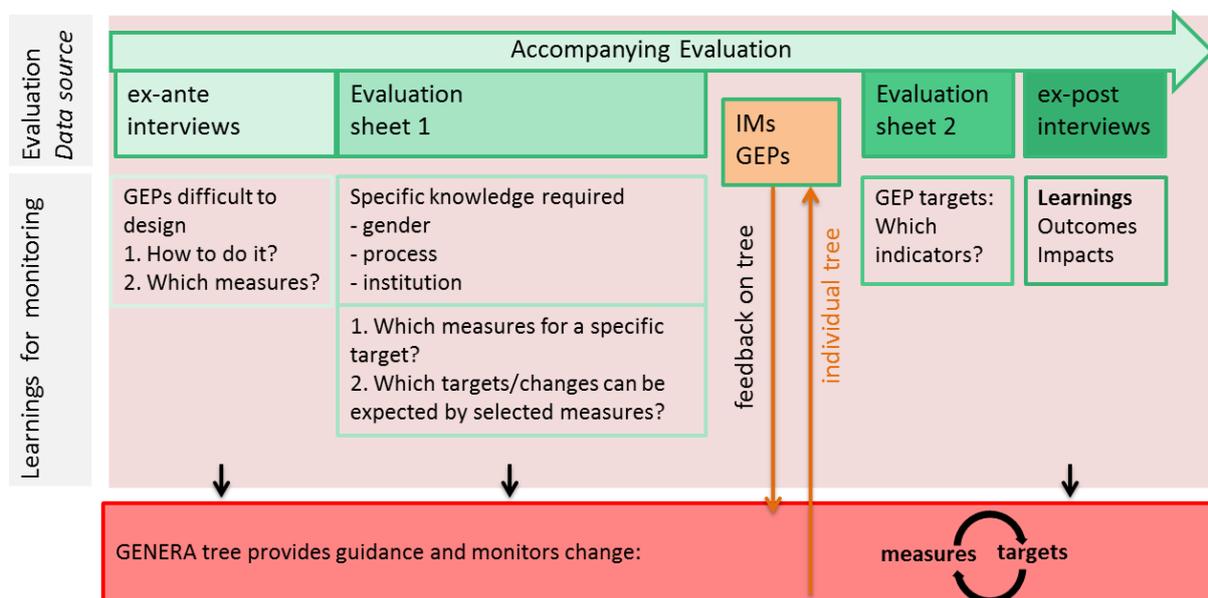


Figure 1: GENERA PAM tool as outcome of accompanying evaluation

The tool is organised into two parts ("living tool"). First, the Action Tree gives an overview of measures and indicators for gender equality in physics and provides a manual on how to use the tool. The Tree can be understood as an answer to the (already formulated) request for guidance. Second, the Monitoring Tool provides indicators per target as well as per measure. When specific targets are already defined, the tree can help finding out which measures should be implemented to reach the formulated targets. The tree is additionally helpful in finding similar or alternative measures.

The tree and the tool have the same structure and the same content. The tool contains all the relevant details firstly on how to reach targets and measures and secondly on how to measure progress. To do so, indicators for all the targets and potential measures for each of the targets are provided. Further, the tree serves to find out which measures (toolbox) serve which targets and helps to identify which targets can be achieved. The idea of the monitoring tree is to provide an additional

visual overview (one page with all targets in a logical order). Therefore, it was recommended to use the tree for orientation and the tool for finding indicators and measures. Besides providing easy instructions and guidance for GEP design and its development these Tools are additionally helpful to reduce complexity when trying to convince the management or suggesting measures and targets to other people within the organisation.

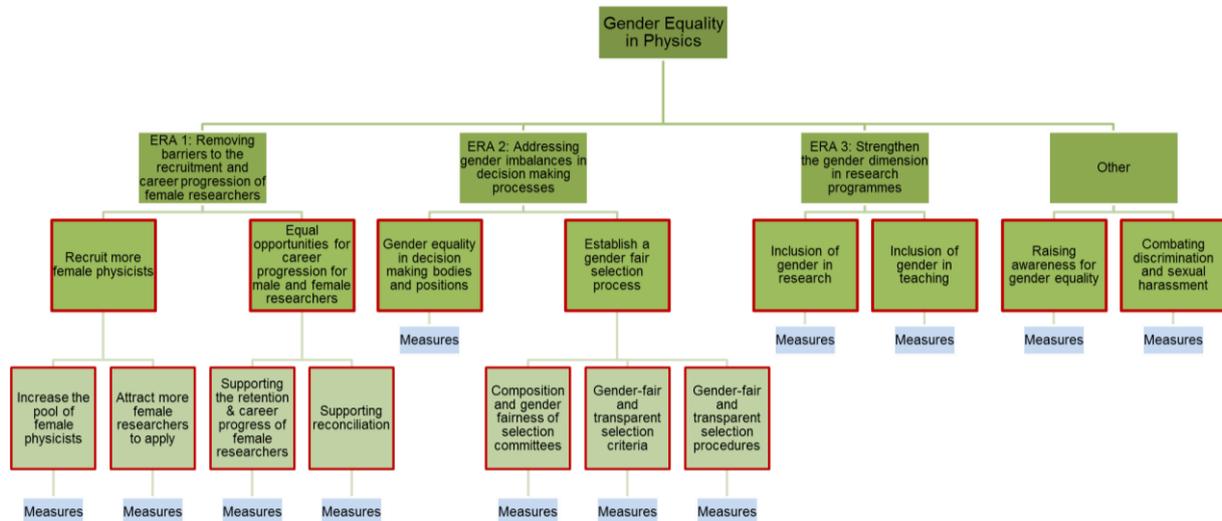


Figure 2: GENERA Action Tree

**Sub-target 1.1.1 Increase the pool of female physicists**

[Go to Indicators](#)

**MEASURES**

Choose measures to reach Sub-target 1.1.1 – a larger pool of female physicists

Where do you want to become active?	Potential activities	Examples for measures	Indicators related to the activity	Indicators related to the target = Indicators to measure changes
Attract more women/girls to study physics	Researchers go to schools	<ul style="list-style-type: none"> <li>Talks</li> <li>Awards for outreach to schools</li> </ul>	<ul style="list-style-type: none"> <li># of talks</li> <li># children reached, by sex</li> <li># schools reached</li> <li># people applying for the award, by sex</li> <li># people awarded, by sex</li> </ul>	<ul style="list-style-type: none"> <li>Bachelor students</li> </ul>
	Events and activities for pupils	<ul style="list-style-type: none"> <li>Labs for school students</li> <li>Science Camp</li> <li>Kid's University</li> <li>Physics Project Days</li> <li>Girls-Only workshops</li> <li>Orientation Days</li> <li>Information events for parents and girls</li> </ul>	<ul style="list-style-type: none"> <li># of events (labs, science camps, kid's university)</li> <li># of pupils participating (per year or per event), by sex</li> </ul>	
	Invite girls to RFO	<ul style="list-style-type: none"> <li>Girls Day</li> </ul>	<ul style="list-style-type: none"> <li># of girls days held</li> <li># of girls participating (per year or per event)</li> </ul>	
	Training and supporting teachers	<ul style="list-style-type: none"> <li>Gender awareness workshops</li> <li>Trainings for teachers or students of educational science</li> <li>Providing teaching material</li> </ul>	<ul style="list-style-type: none"> <li># of teachers trained, by sex</li> <li># of trainings held</li> </ul>	

Figure 3: GENERA Monitoring Tool

### 3. General findings

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This accompanying evaluation covers<sup>3</sup> implementation activities of 11 GENERA partners, primarily in the field of astrophysics, who aimed to foster structural change. From the perspective of an evaluator, their detailed activities and experiences are described and critically discussed in chapters 4 - 14, whereas the self-reporting of the implementation managers (IMs) is outlined in Deliverable D4.4. In this present chapter we discuss some **overall findings and learnings** from our role as Critical Friend. We start with discussing organisational resources, then switch to the structural change issues, followed by a discussion of the role of IMs as agents for change.

#### 3.1. What it means to be a starter

In the field of physics women are underrepresented (see GENERA Minimum Data Set); awareness for gender issues is limited, and male norms dominate the cultures. Physics is perceived and perceives itself as an objective science, which is very much in contrast to dealing with social constructs such as 'gender'. The field lacks a broader discourse on gender and on the causes of gender imbalance. In the interviews with managers and researchers we learned that in some research organisations (RO) there is some awareness of 'gender problem', but mainly in the form of not finding sufficient number of female physicists. Yet, in other ROs the status quo in terms of gender equality was not known, no sex disaggregated data were available, thus the problem was not visible, discussible, measurable. Hence in these ROs, causes of gender inequalities are not seen in the organization, but outside the ROs. The responsibility for the under-representation of women in physics lies not with the field or ROs but with schools ('they do not prepare for physics well enough', in society ('Physics is a field for men') or women („*There are simply not more women in astrophysics*“).

Beside the limited awareness of gender inequality issues and their causes, these ROs can be characterized by a limited data availability and little knowledge about the status quo of gender equality within their own organisation, a lack of expertise on promoting gender equality, and insufficient structures and resources for advancing gender equality, as well as a limited expertise in organisational change processes. The latter mostly implies no or only vague commitment of the management to (structural) change processes. ROs with these characteristics we call 'starters'.

Starting a structural change project in a 'starter' organisation is a heavy task which requires extensive effort to foster Gender Equality Plans (GEPs) as a policy instrument for structural change.

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<sup>3</sup> Activities of the GENERA partners beyond the implementation activities like the project management (WP1), research activities (WP2), establishing a network (WP5) and dissemination activities (WP6) are not covered by the evaluation.

### 3.2. GEP: policy instrument, gender knowledge, time of signature

The Gender Equality Plan (GEP) was defined by EC policy makers as adequate instrument for structural change: the respective call of the European Commission states that structural change projects should „support systemic institutional changes, in particular through the implementation of Gender Equality Plans (GEPs)” (H2020 WP2014/15 NET4SOCIETY, GRI.4.2015). The GEP provides an evidence based, systematic approach with different pre-defined phases including a monitoring system to demonstrate the progress of the change process. One crucial step is to formulate clear targets which force the organisations to develop and implement measures in order to reach the negotiated objectives. Clear targets and clear responsibilities help making GEPs more binding: *“Because now they really have to do it. So far, they were not held accountable.” (IP105)*

In our evaluation we observed that designing a GEP was a complex process which took more time than expected. Finally, 4 of the 6 organisations which had no GEP before managed to sign one, in some ROs GEP negotiations are still ongoing (see in detail D4.4 final implementation report).

One reason for the experienced delays was that the implementing ROs lacked awareness of how structural conditions can cause gender imbalances, and how GEPs as a policy instrument can help fight these imbalances. GEPs were new for some partner organisations. At the time of signing the letter of intent to join a structural change project, it is often unclear what implementing a GEP means, and what steps will be necessary, and what procedures will be involved. While the basic idea is that based on the status quo data, the purpose of the GEP is to formalize the targets, measures and resources for gender-related changes that the project team and the RO management have negotiated, we have found that the design of a GEP is difficult due to the lack of understanding the various phases of implementing a GEP. The GEP was sometimes perceived as formal request (*paper tiger*), the purpose was unclear in respect to:

- Status-quo: Why are systematic data needed?
- Planning: How to translate data into targets and consequently into specific measures?
- Monitoring: why are indicators needed to measure progress?

Concerning the signing of the GEP, considerable differences about the timing and the status of negotiations within an organization could be observed in GENERA. While in some ROs, the GEP is signed (only) after comprehensive negotiations, others prepare a text for signature without having discussed all the details, which takes less time but some challenges for the implementation might show up later. In the case of NWO the signature of the GEP functioned as a starting point for an increase of general awareness. But at the time the GEP was signed the implications (of those signatures) were still unclear for the people in charge of them.

This observation is linked to the organisational process before and after the signature of a GEP. One (ideal) way of practicing the design of a GEP was that the IM / the IM-Team write a GEP and when it is (almost) ready it is presented to the management to sign it. Alternatively, the IMs or IM Team work with the management and after all is finally negotiated, the sum-up paper is signed. Accordingly, the process in the first case might be shorter and the signature might be possible earlier. The challenges might show up AFTER the signature. While in the second case, the internal process is more complex and more time consuming, including loops and backlashes. But when the GEP is in fact signed, the conditions and requirements for the change process to take place, like the full commitment, awareness about the relevant processes of change, data provision, are fully clear for all

people involved. So, it can be concluded that understandings of what 'implementation of a GEP' meant varied. While for some partners the signing of a GEP was already seen as the implementation of the GEP and the real step forward, others understood that the signature is more of a kick-off for getting things started, a starting point for the implementation of measures. It reflects two different understandings of the process how to achieve structural change by implementing a GEP:

- One approach follows the logic according to which the IM and the implementation team – supported by stakeholders – develop a GEP, based on previous work. Both then ask the senior management to sign this document. If this works well (as the procedures is already established, the management is supportive, ...) a GEP may be signed quite quickly. Negotiating might also take less time because less awareness-raising effort is necessary since acceptance of the need to address gender issues or engage in structural change already exists (see chapter 2.1). However, poorly involving the management in the design process can also be a risk. For instance, in one case a final draft was rejected by the management who asked for certain measures to be removed.
- A different approach is to have a GEP prepared by the IM or the IM team through long and intensive negotiations between the project team, the gender equality officer (if there is one) and different members of the management to identify and agree on potential targets, and the measures to achieve them. After this complex and time-consuming process is finished, a document is prepared, summing up the outcomes of these negotiations. This might be more successful later as it includes more awareness-raising activities.

The following graph depicts the different positioning of the GEP implementation within the runtime of a structural change project.

## Implementation of a GEP

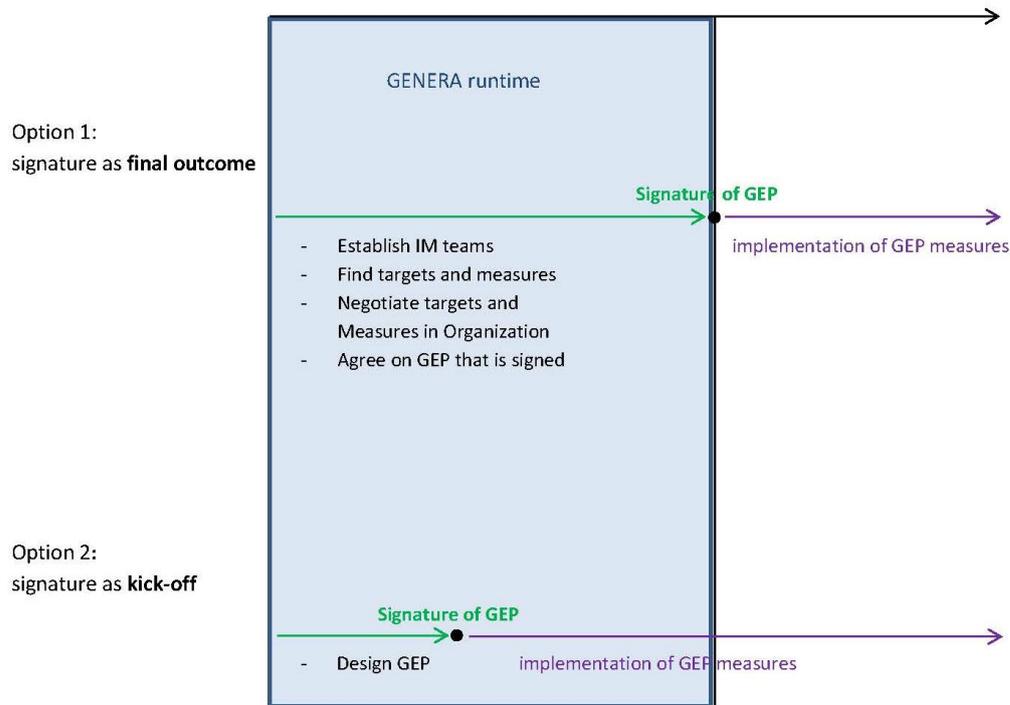


Figure 4: Implementation of a GEP

According to the different timing of the GEP signature within the runtime of a project, the remaining **time for the implementation of measures varies**. When the signature is granted by the management only at the end of the project lifetime, little time is left for the implementation of measures. It is different when some gender equality measures are already in place or the implementation process has already started before GENERA to the situation when GENERA actions are to be integrated into a new GEP.

It is one of our learnings that to mitigate resistances and to prevent low level of achievement, the function and consequences of a GEP need to be communicated and considered in each partner organisation from the beginning, both, in the response to the Call text and later in the initial phase of the structural change project.

Yet, it was argued that a GEP is an efficient instrument for structural change and that a good GEP could be a plus-criterion within the evaluation of research funding at the European as well as on a national level: *"I would say clearly that additional funds, if you have a good GE-policy or GEP in your institution [...] I don't really have a suggestion on how to make this compulsory. But I believe that, saying that Gender is taken into consideration or having few lines in your report or in your proposal, is not enough"* (IP 12).

At any case, EU-funding in this area is perceived as an important signal to increase the importance/significance of the topic within ROs and to further have the opportunity to get things started. The instance that the project is funded and initiated by the EU seems to inspire people to change something and to integrate the gender matter in the organisation: *“what I also expressed in many round tables is: the fact that Europe is financing projects on this topic is very important. Because at least they are useful to make some studies on a statistical basis [...] This is very important because it gets the attention of the people and of the institution beside of the problems we have to deal with. I think that GENERA has done this task very well. In our, I think there is an increase attention, and I'm very happy with this.” (IP 69)*

### 3.3. Structural change projects as intervention measures in research organisations

Another issue observed in various GENERA partner organisations was the problematic relation between the (EC-funded) structural change project and the existing structures and ongoing processes in the partner organisation. This refers to the question how the structural change project becomes embedded in the organisation.

#### 3.3.1. Ownership of a structural change project

It was not always clear to all institutes what an incoming project means in terms of the organisation of and responsibility for the change process. Questions like: “Who owns, creates and empowers the change process?” have to be sorted out beforehand. Also questions in terms of legitimization of IM’s (what are they entitled to do – do they have freedom of action?) have to be considered in the project structure.

As already mentioned above, when signing the letter-of-intent, the management of most GENERA partners was not (fully) aware of what it meant to join the consortium for and to implement a structural change project. Further, some partners hired the IM only in the initial phase of the project. So, as GEPs in GENERA are tailored along the status quo and the customized needs of an organisation, it took some time to negotiate within each partner organisation what a structural change project could be and which parts and processes of the organisation should be addressed. This was even more challenging due to the low level of gender awareness in the field: management and researchers lack of awareness that gender imbalance is linked to core organisational processes. Thus in some GENERA partner organisations the ownership of the structural change process was rather unclear: Who ‘wants’ the project? Who is involved in the next step? Who decides what? Who are the stakeholders who (will) provide support?

A further relevant aspect is that many IMs were employed only on project basis, so their experience and knowledge obtained in the project will not be available to the organisation after the end of GENERA. Additionally, the project duration of 3 years is perceived as challenging, since it is not clear how much and what kind of organisational change can be achieved within this (short) period of time.

#### 3.3.2. Management, Governing Board

The GENERA project architecture included an instrument to strengthen the commitment and involvement of each of the partner organisation’s management. Through the mechanism of the Governing Board, each partner organisation was represented by one member of senior management to foster commitment for structural change. Yet, it has to be concluded – beside other limitations – that most members of the governing board had only limited or no gender knowledge. Thus, they were not really able to promote activities for structural change internally. *“Since ... the governing*

*board showed little interest in gender issues, the role of the board was unclear, also due to ... the general lack of experience and knowledge". (IP92).*

In general, the Governing Board did not provide sufficient support to raise gender awareness at management level – while in the ex-post interviews it was reported that in some GENERA partners, the ex-ante interviews with management members had a considerable impact on the commitment to the GENERA project.

For further policy design, the EC should think about requesting evidence of a systematic involvement of the management already in the proposal phase. As far as we have contested, the letter-of-intent is a (too) weak instrument. Yet, it has to be acknowledged that this might weaken a bottom-up approach like GENERA. If the management needs to be made aware of all the requirements in the proposal phase already, two risks become possible: (i) Making the management aware of what structural change means is demanding and takes time resources that are limited in the proposal phase. (ii) The management might not like to be involved in this awareness raising when it is not clear yet if the proposal will be funded. Or, they might give up all internal negotiations due to lack of time and commitment at this time and thus risk not to submit a proposal at all.

### **3.3.3. Gender Equality Officer**

Additional to ensuring leadership's involvement and support, also crucial to success is the integration into the project of the gender equality officer's (GEO) needs. The collaboration with GEOs needs to be addressed and clarified in terms of their role, responsibilities (division of labour) and their embeddedness within the project's structure. In some GENERA teams the GEO were present as members, and in this way GEO responsibilities overlapped with the GENERA aims. Elsewhere, GENERA teams sometimes faced resistances from the GEO when they were not part of the GENERA team. Tensions or contradictions between structural change project team and the responsible person for gender equality within the organisation make it even more difficult to gain management support (see also D4.4 Final Implementation Report, p. 19).

The lack of support from GEO was sometimes created through a conflicting approach to gender equality than recommended in the GEP. For instance, the GEO may prefer to practice a policy focused on women only and saw the structural change / GEP approach as a dilution of their targets. So there is a need to address this conflict of approaches as some ROs follow classic feminist approaches with focus on women only ("Frauenbeauftragte" in Germany, CUG in Italy). One GEO addressed exactly the limited sustainability of a project-led change: "...these projects, they come and go".

### **3.3.4. Outreach activities as element of structural change**

A few GENERA organisations focused less on their own organisation, but more on outreaching to schools or to the public. This was a success story and will be repeated in the following years.

From a conceptional perspective, the organisation of outreach activities needs to be discussed in relation to the structural change approached. As one challenge for GE specifically in physics is to motivate women to choose this field of research/work, it is understood that GE measures need to target not just the institutes but they already need to address girls in primary and secondary schools.

### 3.4. Gender knowledge, gender stereotypes

One crucial impact of a structural change project is that gender expertise and knowledge are provided and transferred into the RO. This is done by the IMs, by the gender expert board and the evaluators. In the case of GENERA, the physicists involved pointed out that the interdisciplinary team was an opportunity to learn, but also has limitations. On the one hand, the method of mixed teams and the associated interdisciplinary approach is perceived as beneficial. On the other hand, the combination of social science perspectives, gender knowledge, physics and the widespread lack of gender knowledge on the part of many physicists, as well as the bottom up approach proved to be challenging: *“Physicists want to do it themselves. They will not accept it from others.”* (IP105)

In this sense, GENERA contributed a lot to the development of skills of the IMs. It would have helped further to make learnings from other projects also available. Additionally external experts as well as best practice examples should be provided before the design starts, since a lack of support was experienced when no concrete examples of GEPs in the context of physics were known beforehand (IP 94). Furthermore, offering arguments on how to sell measures and on how the organisations benefit from the project is crucial. In this context the right argumentation in terms of a gender-fair process where women can succeed and will be attracted to a job in the organisation should be made available also for senior managers (e.g. female professors) (IP108). Instead of using the simple term “hiring more women” the mentioned argumentation and related change knowledge should be provided also in order to dismantle certain stereotypes (e.g. “women are less competitive”).

In the ex-post-evaluation it became obvious that different actors in the process had different gender knowledge or awareness of gender issues. In the negotiations of a GEP these differences became obvious: Usually, an important prerequisite to start a successful implementation project is a consensual understanding of gender terminology and of the main causes of gender inequalities in society in general, and in the research performing organisations in particular. This establishes a common vocabulary that allows different participants and stakeholders to communicate and understand each other. In some cases we have observed that if involved people use different terminologies or use the same terminology but with different meanings it is not easy to find common ground for promoting gender equality. This often leads to conflicts and resistances that inhibit the implementation process as involved stakeholders cannot agree on a common understanding of the main causes of gender inequalities and which interventions would be suitable to address these inequalities. Therefore, it seems important to address the differences in a consensus building workshops which can open up a space for discussion and reflections, e.g. making the often implicit understandings of gender inequalities and underlying stereotypical conceptions about natural differences between men and women more explicit. Not addressing such essentialistic notions about men and women can become a major obstacle for developing a GEP when the main causes of gender inequalities are perceived to be natural or biologically determined. This often also leads to the emphasis of solutions for improving childcare facilities and possibilities for women, whereas men are not explicitly encouraged to make use of such offerings. This confirms dominant stereotypes about men and women and, therefore, does not really contribute to the necessary and effective structural changes.

Therefore, consensus-building activities are necessary for making such different understandings visible, to raise awareness of the main causes of gender inequalities, and to establish a common

language and mutual understanding among all participants. In this context, unconscious bias trainings could also help.

### 3.5. Implementation managers

To deal successfully with the challenges described above, the ideal IM should be a well experienced consultant – as s/he needs a complex set of competences, be able to convince management, know what target and measures s/he wants to address. S/he is seen as the driver of the change process and design the GEP. Within GENERA, the IM was responsible for designing the GEP – mostly supported by an implementation-team.

In fact, we found that not only the involved ROs were “starters” but so were the IMs. IMs were mostly hired on project basis, which means they were either new in the RO or new in the position as change agent. In both cases, they needed time to learn about how the organisation works, how decisions are made, and how support can be gained in their RO. But also to identify whom to talk with, who are the stakeholders for gender change.

Furthermore, some IMs were young and in the starting phase of their career. So from a power perspective, when negotiating with management, they held a weak position. It was often difficult to get appointments, have emails replied or be heard at all. This was even more the case as most of the IMs were not experts on gender issues. Thus, they lacked a sound knowledge or argumentations to rely on when negotiating with top management. It was a challenge for the IMs to be able to convince organisational leaders through the right arguments, suggest the best measures („What really works in physics?“) or suggest achievable targets that, at the same time, could really make a difference and legitimize all efforts. As most of the IMs were not physicists, it was in particular difficult for them to develop physics-specific arguments. Some of the IMs were physicists, but they experienced a (too) high workload, as research had still priority. Some also felt their research career was threatened or disadvantaged through gender equality work. Beside the GEO, most IMs had no experience in change management. They lacked experience how to proceed in practice beyond pre-defined steps suggested in guidelines or toolboxes. For instance, some IMs reported that it was suggested in a guideline that it is necessary to „gain support from top-management“. Yet they did not know how to do this when directors did not reply to their emails or calls.

The responsibilities of an IM can be described as complex, since many different tasks have to be executed. Firstly, IMs are in charge of convincing the management. Secondly, they have to describe the status quo in gender (im-)balance within the RO, identify what is wrong and how this could be improved or changed (through analysis and monitoring tree). Thirdly, they have to be aware of different cultures within the institute and take this into account in the implementation activities, as well. Fourthly, IMs have to handle the project internally without really knowing the outcome or the final objective.

According to the complex role of IMs, it was stated that they need to be well experienced (know organisation, sell gender arguments well) in order for them and their work to be accepted within the organisation. They also have to offer good internal connections and strong communications skills. It was also advised (IP92) that instead of telling people what to do based on scientific results one should take into account different levels and starting points of the staff members. Transparent approaches are also welcomed and a broader focus on the transfer and spreading of knowledge is suggested (IP92). In conclusion encouragement is important for the work of IMs, as well as the

sharing experiences with other IMs or similar actors, as this quote shows: *“One other thing, which was a big support for us...- as everyone has a lot of difficulties in implementing the plan and it was not so easy e.g. to convince the management, the fact that we could share all of these difficulties during the IM-workshops - and not in the manner that we crying all the time about the difficulties we had but that sometimes we could talk about them - was really very refreshing; to know that all the others also had problems.”* (IP22)

Here they would have benefited from an (external) supervisor or coach. Later in the project it worked well to get support from the exchange of experience with other IMs within the well-supportive IM-team, as described by one IM: *“As IM we established a network of which I believe that in the future I can just pick up the phone or send an e-mail saying, ‘We are doing this, I remember you were involved in it. Give me an advice’.”* (IP22)

For the IMs’ power within the RO as well as in terms of sustainability, it needs to be pointed out that when IMs work on project basis only, the knowledge gained in GENERA is not available to the RO after the project ends. Due to a lack of internal power, little field expertise (not all are physicists), or too little gender knowledge, IMs are sometimes perceived as unprofessional or unexperienced, as this interview quote shows: *“You need seniority and cannot expect a young women presenting what she has found to have a great impact.”* (IP105). This argument clearly demonstrates the existence of stereotypes against young women who are not perceived as competent due to their age.

Hence to execute further implementation in the best way, some IMs expressed need for support through systematic training or at least supervision or coaching by experts. Better communication in terms of the benefits a structural change project (concrete: GEP measures) provided for the implementing organisation would be helpful. In other words, IMs need to be able to successfully sell the GEPs and convince the organisation that they create additional value.

On the policy level, the central role of the IMs needs to be specified as change agents. In this context it is seen as crucial to clarify what skills are needed and what steps have to be taken in practice. Ultimately sharpening the IM’s profile in terms of identifying and communicating their tasks beforehand has to be an objective for further projects.

In the next chapters the 11 cases which represent the 11 partners implementing one or more GEPs are presented in more detail.

## 4. National Research Council (CNR)

Table 2: Sample ex-post interviews CNR

All	Management		HR		Gender Equality Officer		Others <sup>4</sup>		GENERA Team Member <sup>5</sup>	
	F	M	F	M	F	M	F	M	F	M
3					1				1	1

Due to the small number of interviews the complexity of analysis is limited.

Status GEP	No GEP has been designed or signed. The complexity of the organisation, in term of structures, scope and size – CNR has over 8000 employees – made it impossible to obtain involvement and support from management to an extend that would make negotiations about GEP possible.
Content GEP	No GEP was discussed so no content neither.
Process of (GEP) design	Nevertheless, GENERA managed to raise some kind of awareness within the overall organisation and in the high management, both by personal talks and by the Italian GiPD.
Process of implementation	The GEO has implemented measures within CNR so far, mainly focusing on child care.
Most challenging	Convincing the management that gender/GEPs should be a management priority was only limited success (IP12, 13). There was a lack of collaboration with the current GEO who follows a traditional gender equality (GE) policy which is outlined in a 3-years-plan, but has no understanding of a GEP as systematic approach and perceived GENERA as a coming and ending project like others before (IP11, IP12).
Success/support factor	The Italian GiPhD helped increasing awareness. The collaboration with the statistics and HR department was strengthened. For personal learning, the IM-team was perceived as very supportive and inspiring and provided good guidance.
Hindering factors	Within the consortium it took a long time at the beginning until direction was provided and work could start efficiently (IP12). At CNR level it was difficult to involve and get commitment from high level management for GENERA implementation work – although there was a rhetoric commitment, no action followed; also there was also a lack of collaboration with the current GEO. Further, a lack of experience how to implement a change process in such a big organisation was hindering. The involvement of the physics department in the consortium would have made a difference and could have helped that GENERA got more relevance and attention within CNR.
Impact achievements /	<ul style="list-style-type: none"> <li>• Data are available now in a standardized format that enables comparison between different physics institutions and partners</li> <li>• Gender awareness within CNR was raised.</li> <li>• Increased gender knowledge of GENERA partners can be used later, when GEO will change and new collaborative ties can be established.</li> </ul>

<sup>4</sup> researchers, gender experts, former management staff, policy makers

<sup>5</sup> all interviewees who are GENERA team members are listed here and not in another function that they might also cover, e.g. GE Officer or HR manager

	<ul style="list-style-type: none"> <li>• GiphD helped raising awareness at schools/for girls.</li> </ul>
Broader impact	Collaboration with INFN was strengthened (general and gender-related).
sustainability	(informal) network will last and provide opportunity for sharing experiences. GiphD is institutionalized as Gender Day (not physics only any more) and will happen continuously (IP12, 13).
Overall learnings	Highest level of management needs to be involved to make change happen.
Policy learnings	<ul style="list-style-type: none"> <li>• More pressure from European Commission would help, either in form of policies or recommendations or funding rules (IP12).</li> <li>• Internal pressure would be higher if gender (or structural change) is a criterion also in national funding schemes.</li> </ul>
General assessment	Weak progress related to GEP and implementation of measures; no fruitful collaborations could be established, as physics department could not be involved and GEO follows others targets. But progress was made in setting up common standards in data collection.

## 5. National Centre for Scientific Research (CNRS)

Table 3: Sample ex-post interviews CNRS

All	Management		HR		Gender Equality Officer		Others <sup>6</sup>		GENERA Team Member <sup>7</sup>	
	F	M	F	M	F	M	F	M	F	M
7	1	2			1	1	1		2	

Status GEP	At CNRS a GEP already existed before GENERA started, developed during the INTEGER project. This GEP covers all CNRS, not only physics. This is why the GENERA team focused on measures specifically for physics. As physics departments were already part of INTEGER, there was already prior experience in implementing GE measures (IP23). Nevertheless, in the beginning of GENERA the cooperation with the CRNS GE office (GEO) was difficult, after the person changed collaboration became productive (IP21).
GENERA activities	<p>Against this background, the added value of GENERA was that GE was discussed exclusively for the field of physics: <i>“Our role was more to identify items that are relevant for Physics and focus on the implementation of those.”</i> (IP24). As career track of female researchers are perceived as quite equal to men’s (only weak leaky-pipeline), the focus of activities was put on outreach activities; Mainly existing activities were realised/redesigned in a gender sensitive manner.</p> <p>The following GE measures were mentioned:</p> <ul style="list-style-type: none"> <li>• A master class of Physics in laboratories was initially initiated by CERN in different countries, now such classes were organised within CNRS, in the first year only for girls (IP22); but then also included boys because they should also learn about gender issues, stereotypes etc. (IP24).</li> <li>• Awareness-raising events with the university at which many female researchers were invited (IP21).</li> <li>• Exhibition for girls about women in Physics (IP22).</li> <li>• GE-workshop for directors of units or laboratories as part of their management training (IP23).</li> <li>• Workshop with high school teachers: about bias and careers in science (IP24).</li> </ul> <p>These measures will not impact the next GEP; the idea in GENERA was rather to make people at the physics institute more aware and to implement some actions specifically for them (IP24).</p> <p>However, the collaboration with schools shall be further intensified in the future in order to target gender issues already at a younger age. One idea is to organise events at the university for potential students in which the physics labs are open to visit only for girls and have the labs introduced by female physics students or teachers in order to provide young girls with role models (IP23).</p>
Process of	Different to most others, some CNRS physics institutes already participated in

<sup>6</sup> researchers, gender experts, former management staff, policy makers

<sup>7</sup> all interviewees who are GENERA team members are listed here and not in another function that they might also cover, e.g. GE Officer or HR manager

designing measures	a structural change project; thus awareness on gender already existed. Further, the GENERA team analysed career data and found that the problem is not career inequalities, but the low number of female physicists at the beginning of the career. Because of these two reasons, outreach activities - mainly to schools – were launched. As one challenge for GE specifically in physics is to motivate women to choose this field of research/work, GE measures need to target not just the institutes but they need to start already addressing women/girls in primary and secondary schools. As a next step it will be the challenge to have more collaboration with schools as the stereotyping starts already at a younger age: <i>“If we want to break this education, we have to educate the parents, too, although it's (sometimes) too late. But if we [can] break these stereotypes, which are built up by society, including the family and the primary school, we can do it by showing to the girls that they can have a career in a scientific field like Physics. It's the question of models and the stereotypes”</i> (IP23).
Process of implementation	The focus of measures/actions lays on regular events which were organised with more gender sensitivity. The hope is that after GENERA the people in charge of these events will continue. Also seminars to raise awareness were held: <i>“next week I will do a presentation in the Physics Department on Unconscious Bias with GENERA. We organized another event, which is open to all people who work in the Physics Department.”</i> (IP3). Implementation activities often are realised together with the universities that closely collaborate or overlap with CNRS institutes.
Most challenging in design / implementation	<ul style="list-style-type: none"> <li>• Raising awareness on gender: As the French society appears as quite egalitarian (long tradition in external child care), it is perceived as challenging to raise awareness on the gender topic in general: <i>“When I began to work on GE in 2010, GE was not a topic in France. I realized that we had to organize many actions, raising-awareness actions, trainings in order to show people that it's still a topic”</i> (IP23).</li> <li>• Lack of systemic approach: Thus, no systemic approach, eg. a GEP, to change the situation exists: <i>“The problem of GE in high education in the other universities and all institutions is that they don't have a GE policy. They only have one or two actions per years and there are no financial funds, there are no people who work full-time on GE. So, if you want to change the cultural behaviour, you need to have a real policy, to implement a real policy.”</i> (IP23) At CNRS this could be changed by participating in structural change project INTEGER to implement GEP and in GENERA to work in physics more in detail.</li> </ul>
Success/support factor	<ul style="list-style-type: none"> <li>• More gender awareness in physics institutes (IP22).</li> <li>• Raising interest of top management concerning GE: The collected data helped to illustrate problem to the management (IP22); also the GiPD helped to gain visibility and raising awareness (IP24).</li> <li>• IM-workshops were supportive for getting ideas what to do (IP22), monitoring-tree helped to structure work.</li> <li>• Wider perspective on gender-topic and on data was provided to physicists: information-exchange among partners is a benefit (IP24) and also having a mixed community of scientists, sociologists, people with different backgrounds and different competences (IP24).</li> </ul>
Hindering factors	<ul style="list-style-type: none"> <li>• Lack of statistics to show or proof some of the issues, such as the low amount of female speakers at conferences: <i>“if we want to convince people, we need figures”</i> (IP23).</li> <li>• Lack of guidance on where to start when a GEP already exists (IP24) and</li> </ul>

	<p>challenge of finding targets (IP24).</p> <ul style="list-style-type: none"> <li>• Slow start of the project: should be done better (IP25).</li> <li>• Lack of structural measures: Child care is still an issue not solved sufficiently in physics at CNRS: Provide more childcare facilities (IP26); less mobility of females due to child care (IP25); due to reconciliation problems women still face career barriers (IP21).</li> </ul>
Impact / achievements	<p>Knowledge on Gender was increased for GENERA team members. Also at CNRS, the three participating institutes became more conscious of the problems that arise in physics institutes in particular. <i>“The fact that GENERA has brought more meetings and communication on this subject, is, I think, the added value of GENERA. There is more communication, more discussion and more general acceptance of girls and women in Essential Science and Physics.”</i> (IP25). But it was mentioned that the higher awareness is not only necessarily due to GENERA, but also because of general developments (“such as the “me too” movement) (IP21).</p>
Broader impact	<p>GENERA helped to raise awareness about GE issues also in the personal life of consortium members; it motivated to become more involved in GE (IP22).</p>
sustainability	<ul style="list-style-type: none"> <li>• Awareness could be raised and the discussions will continue (IP2).</li> <li>• As the activities realised in GENERA will not impact the next GEP and as it is still unclear if the GENERA member who did most of the work can stay at CRNS, sustainability could be rather weak: experience, knowledge and focus will be lost.</li> <li>• If no additional money come in (by a structural change project), no GENERA-specific action will be sustained(IP22).</li> <li>• Creating a post-GENERA-network is currently negotiated but would help to ensure sustainability (IP25).</li> </ul>
Overall learnings	<ul style="list-style-type: none"> <li>• Lack of sustainability shows relevance of formalizing the steps, i.e. writing all down what is planned and/or what is implemented and potential learnings (IP22).</li> <li>• IMs need more recommendations on how to define targets and measures necessary in order to speed up the process in the beginning. E.g. through clear guidelines from another organisation that has a GEP successfully implemented (IP24).</li> </ul>
Policy learnings	<ul style="list-style-type: none"> <li>• Collaboration with existing GE structures (GEO) needs to be addressed and clarified in a structural change project.</li> </ul>
General assessment	<ul style="list-style-type: none"> <li>• It is not fully clear what the concrete contributions of GENERA have been.</li> <li>• Sustainability of the GENERA-specific actions seems weak, as measures might not continue, but also as no outcomes of measures were formalized and documented.</li> </ul>

## 6. Deutsches Elektronen-Synchrotron (DESY)

Table 4: Sample ex-post interviews DESY

All	Management		HR		Gender Equality Officer		Others <sup>8</sup>		GENERA Team Member <sup>9</sup>	
	F	M	F	M	F	M	F	M	F	M
7	1	1	1		1				2	1

Status of GEP	<p>The GENERA team was drafting a GEP at the time of the site visits and coordinating its content with intra-organisational stakeholders. But there was no clear process established how the drafted GEP will be presented to and discussed with the board of directors and how to secure their agreement. Interviewees also had deviating perceptions whether the GENERA team was drafting the GEP on behalf of the administrative deputy director. It was still unclear at the time of the site visit if the board of directors will agree on a GEP or whether gender equality measures will be integrated into a human resource development plan. The latter is perceived as a weaker instrument for promoting gender equality by some interviewees (IP4, IP3, IP7).</p>
Content GEP	<p>The GEP as drafted by the GENERA implementation manager evolves around 6 objectives. Each objective will be pursued by different measures (IP1, IP3, IP4).</p> <ul style="list-style-type: none"> <li>• Establishment of a gender equality officer: Although Desy has already established an equal opportunity commissioner who promotes equal opportunities for women at DESY, there is no person in charge to coordinate gender equality measures and issues. Therefore the GEP seeks to introduce such a position as part of a personnel development department which should be established in the near future. But at the time of the site visit it was not decided whether such a unit will be established.</li> <li>• Prevention of gender bias in recruitment procedures: this objective should be achieved through different measures. On the one hand research managers and leaders should be trained on (unconscious) gender bias and learn how to avoid this bias in recruitment and selection procedures. Furthermore a study should be conducted on the procedures and practices of turning fixed term contracts into permanent contracts. On the one hand this will provide evidence whether more contracts of men than of women are transformed from fixed term to permanent contracts. But it will also make these processes and practices of removing time limits more transparent and open a discussion about applied criteria and assessments in such procedures. Another measure which will only target administrative personnel is the introduction of anonymized recruitment procedures. The sex of applicants for open positions should not be visible for the</li> </ul>

<sup>8</sup> researchers, gender experts, former management staff, policy makers

<sup>9</sup> all interviewees who are GENERA team members are listed here and not in another function that they might also cover, e.g. GE Officer or HR manager

	<p>members of the recruitment committee. This should avoid gender bias in these procedures.</p> <ul style="list-style-type: none"> <li>• Equal representation of male and female researchers at all levels of seniority and in all committees and boards: A quota should be introduced that women and men should be equally employed as researchers and as administrative staff at DESY. A representation of 50% women at all hierarchical levels should be targeted. This should also be valid for committees and board memberships. Proposed measures to achieve this objectives are stronger standardisation of recruitment processes through guidelines for research managers on gender equal recruitment, support of the equal opportunity commissioner through a gender equality committee (consisting of representatives of different stakeholders like HR department, recruitment panel members etc.) and anonymized recruitment processes (only for administrative personnel).</li> <li>• Integration of gender equality in organisational structures and processes: this should be achieved for instance through usage of gender-neutral language in all forms and reports but also through trainings on gender stereotypes and bias. Furthermore it will be suggested to apply for an award or prize which foresees an internal audit for gender equality or family friendliness.</li> <li>• Establish a centralized GE information portal: as DESY is already implementing measures to promote gender equality and work life balance the GEP plans to establish a web plattform which brings all of these measures and activities together. It should function as a central point of information for employees who seek support or specific information on GE and equal opportunities at DESY.</li> </ul> <p>Furthermore the GEP will provide a description of the status of gender equality at DESY and will also include provisions for monitoring and evaluation of the implementation progress (IP1). It is also foreseen to establish clear responsibilities for each objective and measure and to specify the available resources.</p> <p>One interviewee raised the expectation that the GEP will include very specific objectives which can be measured, monitored and evaluated. This will be an improvement compared to the human resource development plan (IP6, IP5).</p>
<p>Process of (GEP) <b>design</b> – descriptive</p>	<p>The development of a GEP was embedded into the process of designing a new human resource development plan. The former human resource development plan (which exists since 2006) as well as the draft of the new plan includes references and measures to gender equality but is broader in its objectives. It is developed by a task force consisting of different intra-organizational stakeholders (HR department, equal opportunity commissioner, works council etc.) and headed by the deputy director of DESY. The GENERA team was invited to participate in these meetings as observers and experts on gender equality and to provide input for this new human resource development plan and on GEPs and their advantages and disadvantages.</p> <p>Some interviewees mentioned that in the course of these meetings the GENERA team has been asked by the administrative deputy director to</p>

	<p>draft a GEP for DESY which could be used as a starting point for negotiations but also make clear to all involved stakeholders how such an instrument could look like and what are its advantages and benefits. The plan was to start developing a GEP based on the draft version after the human resource development plan has been decided.</p> <p>But the deputy manager was not able to recall this assignment in the interview and had a different process for preparing a GEP in mind. The GEP will be designed and implemented by a new unit responsible for human resource development. But the board of directors has not decided on establishing such a new unit at the time of the site visit (IP4, IP5, IP1, IP3, IP7). After the interviews with DESY representatives a meeting was arranged to clarify these different understandings between the deputy director and the GENERA team. In the meeting it was decided that the GENERA team should continue working on a draft GEP which should be taken up by the new human resource development unit. The administrative deputy director confirmed her commitment to support the establishment and implementation of a GEP.</p> <p>Nevertheless, the GENERA implementation manager has started to coordinate drafting a GEP for DESY. The GEP has been inspired by GEPs from other Helmholtz research performing organisations, the GENERA toolbox and roadmap but also on the status quo analysis and on the findings from interviews with female physicists. Furthermore different organisational stakeholders (works council, equal opportunity commissioner, international relation office, HR department) were asked for suggestions of objectives and measures to be included into the draft GEP. The most important collaborator in defining objectives and measures was the equal opportunity commissioner. After a set of objectives and related measures have been defined feedback from these stakeholders has been collected but only a few stakeholders provided feedback.</p> <p>The GENERA team has planned to provide a draft GEP until the end of August which can then be presented to and discussed with the board of directors. As the runtime of the GENERA project ends at the end of August either the administrative deputy director or the equal opportunity commissioner will have to lead the negotiations on GEP implementation with the board of directors. The last information provided by the GENERA team it seems that the administrative deputy director will take over the responsibility to negotiate a GEP.</p>
<p>Process of implementation – descriptive</p>	<p>As a GEP was not established no implementation of its measures has been taken place. Therefore nothing can be reported here.</p>
<p>Most challenging</p>	<p>An important challenge seemed to be the navigation between differing or changing interest of different stakeholders at DESY. To understand these interests and power dynamics played out in processes like the development of a human resource development plan was challenging for GENERA team members which were not involved in these processes and negotiations before the GENERA project has started. Therefore it took some time to get a better understanding of the dynamics of these processes and to be able to convince stakeholders to support the objectives of the GENERA project. This was evident in the resistance of</p>

	<p>some stakeholders against a GEP which could only be convinced to support the GEP development after bilateral talks and providing more detailed information about its relevance and benefits for the organisation (in comparison to already existing instruments like the human resource development plan) (IP1, IP3, IP4, IP7).</p>
<p>Success/support factor</p>	<p>In the interviews following factors were mentioned that supported the development of a GEP:</p> <ul style="list-style-type: none"> <li>• Exchange with gender equality experts and practitioners from other research performing organisations internal or external to the GENERA consortium. This resulted not only in a better understanding of which measures and actions are useful and effective but also in a better understanding of framework conditions that made successful implementations of gender equality measures possible (IP1, IP2, IP3).</li> <li>• DESY is part of the Helmholtz Association of German Research Centers which is committed to promote gender equality in its research centers through setting target values for participation of female researchers, installing equal opportunity commissioners and other activities like Helmholtz professorships or the Helmholtz Mentoring programme. This has to be considered as a supportive condition for the GENERA project (IP5). Nevertheless it seems that this has not contributed to a more effective development and implementation process significantly. Maybe because DESY performs quite well on the target values set in the realm of the cascade model and no sanctions are foreseen in case targets are not accomplished. Therefore no real need for further actions was evident for the board of directors as the figures seemed to be in line with the defined target values (IP5).</li> <li>• Another important supportive factor was establishing good collaborations with the leader of the HR department and with the new equal opportunity commissioner. Collaboration was based on mutual support and exchange of information and know-how and was therefore perceived as beneficial for both sides.</li> <li>• Support and solidarity within the GENERA team helped to reflect and to understand complex situations and to identify possible alternative strategies (IP3).</li> </ul>
<p>Hindering factors</p>	<p>The most important hindering factor named by several interviewees was the low awareness for the relevance of gender equality in the board of directors and the resulting low commitment to gender equality and to the development and implementation of a GEP (IP1, IP3, IP4, IP5, IP7).</p> <p>Also some other stakeholders were reluctant to support the objectives of the GENERA project which resulted in low response rates to requests by the GENERA team or low involvement into its activities. This might also be a result of the low support from the management level as of this missing commitment the GENERA activities were not perceived as of high priority and relevance but only as additional work and burden (IP3).</p> <p>According to the Bundesgleichstellungsgesetz DESY as a non-university public research center needs to develop and implement a GEP. Although this was emphasized by the GENERA team the directors had opposing opinions on this matter and therefore were not responsive to this argument. Therefore the reference to the Bundesgleichstellungsgesetz</p>

	<p>could not be used to put pressure on the management and to convince the board of directors to support the GENERA activities with more emphasis (IP1, IP4).</p> <p>Another issue that was raised in the interviews concerned the status and negotiating power of employees that work only on fixed term contracts. Are these employees really in the position to negotiate and bargain with organisational stakeholders and managers who might be involved in decisions about their future employment at the organisations? (IP3) The bargaining power of such employees has to be considered as very limited as they are working in precarious employment conditions. But on the other hand several interviewees also mentioned that the expertise of these employees was very valuable and appreciated (IP3, IP5, IP4). Nevertheless, they are not strong change agents within DESY although they are committed and possess the relevant expertise. To balance this weak negotiation power strong collaborations with important stakeholders are necessary but this was achieved only in the second half of the project runtime.</p>
<p>Impact achievements /</p>	<p>Through the GENERA project and its team members DESY has gained additional expertise on gender studies and gender equality in science. This has supported on the one hand the discussion around developing a GEP and has help to clarify why a GEP is needed and which benefits this will bring to the organisations. It was therefore relevant for raising the awareness and convincing different organisational stakeholders for developing a GEP (IP2, IP3, IP7). But this awareness raising is limited as the board of directors has not yet approved the development of a GEP and it is not clear whether this will be the case in the future. But the support and commitment from the administrative deputy director and the support of the equal opportunity commissioner is an important step towards approving a GEP. On the other hand interviewees reported that gender equality and GENERA were discussed in meetings which were not explicitly dedicated to this topic. This can be understood as evidence for awareness raising and higher visibility of gender equality. Further evidence for this is provided in other interviews with GENERA team members who mention that they are approached informally by colleagues who want to know more about the project or who want to share a story on gender (in)equality (IP1, IP3, IP6). Especially the GiPD was mentioned very often as a milestone for raising awareness among employees within the organisation. This event opened up discussions and made the project and its objectives visible (IP1, IP3, IP4, IP2, IP7). Other interviewees were more sceptical concerning the scope of awareness raising activities of GENERA and the profile of the GENERA project (IP5).</p> <p>One achievement of the GENERA project is related to monitoring and data collection. The status quo assessment has raised the awareness that additional data is necessary to develop a better understanding of gender equality at DESY. Therefore the HR department has already introduced some changes to their data collection activities regarding the reasons for leaving the organisations. These reasons are surveyed now in more detail. The HR department is willing to collect more data for assessing gender equality as long as it is efficient and in line with data protection regulation. Therefore the GENERA team should provide suggestions for</p>

	<p>relevant data that should be collected in the future and discuss this with the HR department (IP6).</p> <p>Another result of GENERA is the establishment of a small network of gender equality officers at the DESY campus (which hosts different research performing organisations) to exchange about current activities and experiences and to promote more coordinated efforts between organisations located at the DESY campus (IP3).</p>
Sustainability	<p>Assessing the sustainability of the activities started at DESY is hardly feasible as there is no clear plan how to get the approval for a GEP from the board of directors. One important step was made after the ex-post interviews: securing the support and commitment of the deputy director for developing a GEP.</p> <p>It seems that some stakeholders at DESY like the deputy director, the equal opportunity commissioner or the head of the HR department are (strong) supporters of gender equality and of developing a GEP. Convincing these stakeholders about the relevance and necessity of a GEP for DESY has to be considered as an important achievement which will contribute to sustainability. But of course a stronger engagement of the board of directors still needs to be accomplished in the future.</p> <p>Furthermore, some interviewees are hoping for a new funded project which will allow them to continue the work started in the GENERA project. The involvement of DESY in other H2020 funded projects like ACT will foster the sustainability of results. But relying on external funding to promote gender equality cannot be considered as a good sustainability strategy.</p>
Overall learnings	<ul style="list-style-type: none"> <li>• Securing the commitment of the top level management is key to a successful development and implementation process. Without such commitment all project related activities are lacking legitimization and are therefore not considered as of high priority.</li> <li>• Coordination between project members and organisational stakeholders are important. Seeking common interests and mutual benefits is the foundation of good collaborations. But also defining clear processes, responsibilities, involvement of boards and commissions, and reporting structures at the beginning of the project will foster the coordination between project members and organisational stakeholders. This has to be considered as a duty of the organisation hosting such a project but also of the project members to insist on clarifying these interfaces and responsibilities. More over all future proposal or projects should describe these interfaces and responsibilities much more in detail.</li> <li>• Projects like GENERA have to be understood as interventions into complex systems. To understand these systems and to be able to initiate change processes in such systems following requirements are of high relevance (among others): <ul style="list-style-type: none"> <li>○ Strong engagement and commitment of top level management</li> <li>○ Strong coordination with relevant stakeholders</li> <li>○ Identify and engage change agents with negotiating power</li> </ul> </li> </ul>

	<ul style="list-style-type: none"><li>○ Project timeline needs to be aligned to the timeline of intra-organisational processes</li><li>○ Clear responsibilities and reporting structures between project and organisational activities</li></ul>
Policy learnings	

## 7. Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering (IFIN-HH)

Table 5: Sample ex-post interviews IFIN-HH

All	Management		HR		Gender Equality Officer		Others <sup>10</sup>		GENERA Team Member <sup>11</sup>	
	F	M	F	M	F	M	F	M	F	M
4					1		1		1	1

Status quo of GEP	<p>The GEP has been developed and sent to the management for approval.</p> <p>The GENERA team does not have a response from the management yet but is confident that the General Director will approve and sign the GEP. One interviewee mentions that the GEP comprises only modest recommendations for the IFIN-HH as the situation of gender equality is already quite advanced (IP1). This is reflected in a paragraph of the GEP which states that it was designed “in accordance with the minimum content” defined at the GENERA implementation manager team meeting in Munich in May 2017 (GEP, p. 5). But also the management is not convinced of the necessity of a GEP. Nevertheless the implementation team is expecting the management to make adaptations to the GEP. At the time of the interviews it was not foreseeable when the General Director will sign the GEP.</p>
Content GEP	<p>The GEP suggested to the management includes following objectives and measures (GEP):</p> <p><u>Objectives:</u></p> <ul style="list-style-type: none"> <li>• More attention should be paid to the annual gender equality reports required by the Romanian law.</li> <li>• Introduce a gender equality appointee</li> <li>• Attract and employ more women researchers</li> <li>• More balanced distribution of men and women in all committees and boards at IFIN-HH.</li> <li>• Supporting women with care responsibilities</li> <li>• Finding common solutions for childcare facilities for mothers with young children among institutions situated at the Magurele Physics Platform</li> <li>• IFIN-HH should promote regulations at the national level that take career breaks of women for child care into account and thereby increase the chances of women in recruitment and selection processes.</li> </ul> <p><u>Measures:</u></p>

<sup>10</sup> researchers, gender experts, former management staff, policy makers

<sup>11</sup> all interviewees who are GENERA team members are listed here and not in another function that they might also cover, e.g. GE Officer or HR manager

- Monitoring of the implementation process and of the progress of the proposed measures done by internal and external experts.
- Continue equal treatment policies for women and men through non-discrimination with respect to gender equality in the professional life
- Promote gender mainstreaming to integrate gender equality policies into all organisational regulations and structures and secure the commitment of the management
- to ensure the balanced participation of women and men in the decision making processes through promotion of women in representative organizational structures (commissions, councils, committees, etc.)
- to support mentoring and internship programs for students aiming to attract a greater number of women in physics research
- Organize coaching and training programmes for all employees to raise the awareness for gender inequalities.
- Establish a platform and forum which provides information on gender equality at IFIN-HH and which promotes discussions among employees on this topic.
- to promote family friendly policies within the organization to balance the personal and professional life: dual career, telework, childcare facilities etc.

Considering the content of the GEP following aspects have to be assessed critically:

There is a strong focus on women with care responsibilities – either to promote national regulations for supporting women with career breaks or to promote work life balance policies (flexible working time, telework, childcare facilities etc.) for women. This is of course important but interestingly these objectives seem to focus only on women but do not mention fathers as a target group. It is highly advisable to include fathers explicitly into these objectives and measures. The feedback from the IFIN-HH implementation team on this report points out that these measures are addressing - in accordance with Rumanian legislation - all employees and can therefore be used by men and women. Nevertheless, from the standpoint of the evaluation it is considered important that men are explicitly targeted and motivated to make use of family friendly policies to get more involved into childcare activities.

In the GEP gender inequalities are described as originating from cultural, social and biological origins. Women and men are rather seen as *“complementary than as identical”* (GEP IFIN HH, p.4) which can cause gender inequalities. This is a problematic statement as it leaves open in which way they are complementary and constructs women and men as two distinct but homogenous groups. This suggests that women are more suited for specific tasks like childrearing, caring than men which are more able to perform different sets of tasks and responsibilities. This will not contribute to reducing gender equality but will freeze existing gender inequalities. Furthermore, gender inequalities stemming from biological differences cannot be tackled through a GEP. Therefore it seems inappropriate to refer to biological origins in a GEP.

	It is not really clear from the GEP who will responsible for its implementation (GEP). Therefore it is advisable to appoint someone with sufficient resources and expertise for implementing the GEP measures.
Process of (GEP) <b>design</b> – descriptive	The GEP was designed by the IFIN-HH GENERA team. Other stakeholders within the organisation were not involved in designing the GEP due to a lack of interest and awareness (IP2+3). The guidelines and minimum standards for developing a GEP agreed upon by all GENERA implementation managers in Munich in May 2017 were taken into account (GEP, p.5).
Process of implementation – descriptive	As the GEP was not approved at the time of the interviews the implementation of suggested measures has not started. Besides the GIPD and the data collection on the status quo of gender equality in careers in physics no other measures have been implemented in the course of the GENERA project.
Most challenging	<p>At IFIN-HH male and female researchers are nearly equally represented as 41% of all R&amp;D employees are female (GEP, p. 8) Especially at the level of students and junior faculty the share of women is considerable high. But in senior research positions women are still underrepresented (IP1). Therefore gender equality is perceived by the top level management as already achieved and is therefore not seen as a priority issue anymore. This results in a low support from the management for the objectives of GENERA and especially for developing and implementing a GEP (IP2+3).</p> <p>The implementation manager has changed two times in the course of the project. Of course in terms of acquiring competencies for developing and implementing GEPs, knowledge transfer and continuity this has been very challenging for implementing the project (IP1, IP2+3). The new implementation manager is a trade union member and is responsible for annual gender equality reports demanded by Romanian law. Therefore she has a lot of experience on gender equality at IFIN-HH which will facilitate the GEP implementation in the future.</p> <p>Besides the low awareness, another excuse for not cooperating with the GENERA team reported by ex-post interviewees was the lack of time of relevant stakeholders (IP2+3). But it seems that this is very much related to the lack of awareness and the low priority of gender equality at IFIN-HH (see below hindering factors).</p>
Success/support factor	Non identified.
Hindering factors	The most important obstacle encountered in the course of the GENERA project was the low commitment of the management but also from other organisational stakeholders like the HR department to designing and implementing a GEP. For instance, the GENERA team wanted to install a gender equality office at IFIN-HH and include it in the GEP but it seems that this is not supported by the management as they do not see a clear need for this. But on the national level the new prime minister has stated that she wants to have gender equality offices in all public organisations – although there is no regulation yet this might force the IFIN-HH management to establish such an office in the future (IP2+3).
Impact /	Nearly all interview partners agree that the most important achievement of

achievements	GENERA is a higher awareness of researchers working at the IFIN-HH for gender equality issues. Also the GIPD contributed to this increase of awareness (IP2+3, IP4). Still it is often mentioned in the interviews that the low awareness for the relevance of gender equality is persistent and has been a major obstacle for designing a GEP (IP2+3).
Broader impact	One of the interviewees mentioned that she was approached by different people within the organisation. Not all were sharing the objectives of the GENERA project but it allowed her to get in contact with a lot of people and to extend her networks. This will be important for the implementation process of the GEP in the future.
sustainability	The sustainability of the activities started within the GENERA project has to be assessed critically as nearly all interview partners stated that they do not think that any resources will be available to continue the work and for implementing a GEP (if it gets the approval of the management) (IP1, IP2+3). Furthermore, the GEP does not define who will be responsible for its implementation and its monitoring (GEP).
Overall learnings	Commitment of the top level management but also from other stakeholders is key to implementation of gender equality.
Policy learnings	Pressure and support from the European commission are very helpful to convince the management to take gender equality more seriously, to raise their awareness and to show more commitment.

## 8. Instituto de Astrofísica de Canarias (IAC)

Table 6: Sample ex-post interviews IAC

All	Management		HR		Gender Equality Officer		Others <sup>12</sup>		GENERA Team Member <sup>13</sup>	
	F	M	F	M	F	M	F	M	F	M
8		2		1	2		1		2	

Status of GEP	A new GEP is currently under development. A working group has drafted suggestions for objectives and measures to be included into the GEP. Negotiations with the management have not started at the time of the site visit. The runtime of this new GEP should be 2019 to 2021. The current GEP is still running until the end of 2018 and its implementation is supported by the GENERA project (IP1).
Content GEP	<p>The former two GEPs at IAC were described by some interview partners as lacking concrete implementation as only few measures have been put into place (IP4, IP1). The new GEP is intended to promote change on the structural level (IP6) at IAC through introducing very specific and focused measures and allocating resources for their implementation (IP5).</p> <ul style="list-style-type: none"> <li>• The major obstacle for implementing gender equality at the IAC was identified by several interviewees as the lack of structure for gender equality although there is a Gender Equality Commission in place. The members of this committee are appointed by and report to the IAC Governing Board. The GE committee oversees gender equality at IAC but commission member work on a honorary basis. Therefore GE work is always additional work to the research and administrative work and is not followed up by all GE commission members consequently. Also the experiences of the GENERA project made evident the importance of a gender equality expert who coordinates activities and acts as a central hub for all matters related to GE (IP1).</li> <li>• Gender equality oriented evaluation of scientific merit in selection and recruitment procedures. On the one hand the suggested intervention foresees to focus the evaluation of scientific merits less on the number of publications and more on their quality. Therefore the evaluation model of the ERC should be taken as a role model which focuses the evaluation of scientific merits – besides assessing the proposed research project – on the 3 most relevant publications. On the other hand the IAC should introduce career break positions for women (and men) who are returning from parental leave and therefore were not able to publish in the same extent as their colleagues. These positions should allow them to catch up again and to improve their scientific output and competitiveness (IP1).</li> <li>• Work-life balance: A study should be conducted that provides evidence for</li> </ul>

<sup>12</sup> researchers, gender experts, former management staff, policy makers

<sup>13</sup> all interviewees who are GENERA team members are listed here and not in another function that they might also cover, e.g. GE Officer or HR manager

	<p>the demand of onsite childcare facilities at the IAC facilities. After the demand has been estimated different solutions should be discussed. Also the management perceives work life balance as a major obstacle for the career progression of female scientists in physics but perceives this more as a problem of society than as a problem for IAC. Furthermore the management cannot pay for childcare facilities for employees as this by the Spanish ministry has not spent resources on this matter since several years. Still IAC employees can ask for financial support for childcare services under the social action plan.</p> <ul style="list-style-type: none"> <li>• Changing the organizational culture at IAC towards more gender equality: based on the qualitative interviews with female physicists the expectations towards behaviour of women and men in the organizations should be changed and a new leadership style should be established. To foster the outreach also into the private economic sector the spin off projects should be involved in this activity as well. A representative of the IAC spin off projects has been appointed as a delegate to the GE commission and will participate in the meetings of the commission in the future (IP1).</li> <li>• Related to this activity a protocol which details how to deal with incidents of sexual harassment should be developed and put into place. Although there is a protocol already in place it is not considered as very effective. Therefore a new protocol should be developed (IP1, IP2).</li> </ul>
<p>Process of (GEP) design – descriptive</p>	<p>For the development of the new GEP a working group has been set up on behalf of the management board, led by the GENERA implementation manager and responsible to the gender equality commission (IP6). The group consists of members from all IAC areas and from different groups of employees (a PhD student, a post doc, an engineer and an administrative employee). The working group reports to the GE commission but is not directly in contact with the management board of IAC. The head of HR department is acting as interface between the management and the working group. The task of designing a GEP was performed through a participatory approach involving people from all areas of IAC at different stages of the development process (IP1).</p> <p>Based on the experiences from the first two GEPS and on the results of the interviews with female physicists at IAC a set of problems and objectives were identified. These problems and objectives were presented and discussed at different meetings where representatives of the different areas of IAC have been invited. At this meeting also suggestions were collected for further issues that should be included into the GEP. After collecting problems and objectives a prioritization meeting was organized again involving staff from all IAC areas. In this meeting problems and objectives were prioritized. Based on this prioritization the most important problems and objectives were selected and related measures were suggested to be included into the new GEP. In a next step the suggested measures will again be discussed in a participatory workshop with different groups of employees (IP1, IP2). The objectives and measures have also been discussed with a network of female researchers working at IAC (IP1).</p> <p>This participatory approach on the hand increased the visibility of the GENERA project, its activities and of gender equality in general. On the other hand it also should legitimize the objectives and measures introduced in the GEP as they are founded in a bottom up approach. This should facilitate the negotiations with the management but also increase their acceptance by employees and line managers (IP2, IP1).</p>

<p>Process of implementation – descriptive</p>	<p>The implementation activities at IAC were related to the second GEP which came into force at the start of the GENERA project and will stay in force until the end of 2018. The IAC team decided to support the implementation of the second GEP and to start developing a new GEP coming into force in 2019 (IP1).</p> <p>Therefore the GENERA Implementation manager has made a plan for implementing the second GEP and divided responsibilities for measures among members of the GE commission. The IM also reported on the progress of its implementation and coordinated all related activities. The level of implementation is about 50% which means that not all actions of the second GEP were really implemented (IP1). The second GEP was not planned consistently. Therefore it consisted of a quite diverse set of measures which were not really related to concrete objectives and which have already been part of the first GEP (IP1). One interviewee mentioned that the second GEP would have not been implemented without the resources and expertise of the GENERA project and the hired IM (IP1).</p> <p>In the course of the implementation of the second GEP following activities have been implemented: trainings and workshops on gender equality focusing on gender in science and on sexual harassment, introduction of regulations to improve work life balance into the collective agreement, provisions for gender equality were introduced into selection processes like raising awareness for equal treatment of selection committee members, recognition of maternity/paternity leave periods in merit assessments (IP1, IP6, IP7).</p> <p>The implementation of the new GEP will be coordinated either by the GE commission or by the newly introduced gender equality officer. But the responsibility of implementing measures will be distributed between different administrative units like HR etc. (IP1)</p>
<p>Most challenging</p>	<p>It will be difficult to get the commitment of the management board and of the director but also from all members of the GE commission for all objectives and measures proposed in the GEP (IP2).</p> <p>The low visibility of the project has been named by one interviewee as an obstacle to reaching a wider impact. The management has not sufficiently supported the project and disseminated its activities and objectives as it would have done it with other research grants (IP2). Other interviewees have pointed out that the IAC director has officially inaugurated the GiPD at IAC and the head of the administrative units has participated in the GENERA governing board meetings (IP5, IP6). These are indications that the top management has supported the GENERA project and the development of a new GEP at IAC. Nevertheless the touchstone for the commitment of the management will be the negotiations about the objectives, measures and resources for the new GEP.</p>
<p>Success/support factor</p>	<p>The most important facilitating factor was seen by nearly all interviewees in hiring a gender expert for implementing and designing a GEP. This person did have on the one hand the relevant skills to initiate a well thought of participatory process for developing a GEP as well as gender expertise and on the other hand could devote nearly all of her working time to promote gender equality and coordinate the GENERA activities (IP2, IP3, IP4, IP6). That has brought a momentum for gender equality to the IAC and has contributed to a more professional approach to implementation and development of gender equality measures (IP7).</p>

	<p>One important facilitating factor was that the implementation manager was trying to build up a lot of connections to different groups and stakeholders within the organization. These formal and informal encounters were important to exchange information, to gain support and commitment. Therefore a critical mass of people is now involved in the activities to promote gender equality at IAC (IP6, IP1). It also contributed to the visibility of the project and its objectives.</p> <p>A further important facilitating factor was the fact that the organizational timeline for implementing and developing a GEP fitted very well to the runtime of the GENERA project. Therefore it was on the one hand possible to work on the implementation of the already existing GEP and to start to develop a concept for a new GEP which should come into force in the beginning of 2019.</p> <p>The implementation work was also supported by the GENERA toolbox which allowed to present good practices of gender equality. This supported the argumentation for introducing specific measures and objectives (IP1).</p> <p>The participatory approach used to define and prioritize objectives and measures of the GEP has to be considered as a strength as it founds the demands and suggestions on a broader consensus and basis. It represents the interests not only of a small working group but is based on discussions with a bigger group of people representing all IAC areas (IP2).</p> <p>Further supporting factors are mentioned which are related to the national and international context. On the one hand the Spanish law on science and technology has specific provisions for gender equality: public research organizations need to implement a GEP, equal treatment of men and women needs to be guaranteed and the gender dimension should be integrated into the research content. These provisions are helpful in arguing for gender equality in the organization. On the other hand in the course of the me-too-debate gender equality has gained a lot of attention in the media in Spain and this has also raised the awareness for this topic at IAC (IP1, IP4).</p>
Hindering factors	<p>The lack of time to deal with gender equality besides the normal duties and responsibilities has been reported frequently as an obstacle to implementing a GEP (IP6, IP1). This is related on the one hand to the lack of gender equality officer and to the honorary nature of the GE commission on the other hand. But the example of the GENERA implementation manager makes evident that the GE commission can work effectively if supported by an expert equipped with sufficient resources.</p> <p>Another hindering factor mentioned in different interviews was a low awareness of gender inequalities and for the relevance of gender equality for research and innovation. Therefore the management but also other representatives of the IAC were not fully committed to the objectives of the GENERA project (IP3).</p> <p>The project and its objectives were confronted with open resistances from some of employees who spoke out against gender equality. Although the management has reacted against these open resistance but it seems there</p>

	<p>was no open statement which confirmed the commitment of the IAC and its management towards promoting equal opportunities of men and women. Therefore although the management has acted against the resistance it did not use this opportunity to support and enhance its commitment. Therefore the reaction was perceived as weak and inappropriate by some interviewees.</p>
Impact / achievements	<p>Interviewees mostly mention an increased awareness for gender equality at IAC as the outcome of GENERA. Although the IAC has been working on gender equality before the GENERA project has initiated some momentum and engaged more stakeholders and employees but also professionalized the work and activities of the GE commission. To keep up this momentum after the IM has left and the GENERA project has ended will be the most important task for the GE commission (IP5, IP6, IP7, IP8).</p> <p>During the runtime of the GENERA project the IAC management has dedicated a specific budget for gender equality which can be disposed by the gender equality commission. Although this cannot be attributed to the GENERA project alone the involvement of IAC into such a project has contributed to a higher commitment of the management that actions to promote gender equality need to be implemented. Therefore the equality commission requested the budget from the management which consented to provide such a budget for organizing talks, workshops and other activities (IP6, IP4). For the next GEP a budget for its implementation will be provided to the GE commission by the governing board. The size of the budget will depend on the measures and objectives of the GEP.</p> <p>Furthermore due to the work of the implementation manager the more intra organizational stakeholders could be involved into the promotion of gender equality and this contributed to a higher level of awareness (IP7, IP1). This will also enhance the coordination of activities to promote gender equality at IAC in the future. Another result which is not yet fully realized but to which the GENERA project has contributed is the introduction of a new position for gender equality. This new position is foreseen in the new structure of IAC which still needs to be discussed with and approved by the national authorities. The gender equality officer can then build on the work started in GENERA, make use of the higher awareness and coordinate the implementation of the GEP (IP5).</p> <p>One achievement mentioned by interviewees was the report on gender equality issues in research careers and organizations. This provided a lot of input for developing the GEP and raised the awareness for the challenges of gender equality at IAC (IP7).</p> <p>Additionally two workshops about Gender in Science and on sexual harassment were conducted to raise the awareness of employees at IAC on these topics. As a result of the GIPD at IAC an informal lunch meeting for women researchers and engineers every second Thursday has been introduced where experiences are exchanged and advice on career, work and private life related questions is provided.</p> <p>All in all the GENERA project has contributed to an empowerment of gender equality issues and especially of the gender equality commission at IAC. The most important factor driving this development was the implementation manager who possessed the relevant skills and expertise to guide the</p>

	<p>development of the new GEP and to coordinate the implementation of the current GEP. It seems that through this the IAC has made an important step from a formal commitment to gender equality indicated by the availability of GEPs and a GE commission to beginning to take actions and to provide a dedicated structure and resources to promote gender equality. First actions were implemented in the course of the current GEP. These actions although suggested in the GEP would not have been implemented without the GENERA project (IP7).</p>
Broader impact	<p>During the runtime of the GENERA project guidelines for organizing conferences in accordance with principles of gender equality have been established. These guidelines also address the topic of sexual harassment at conferences. But they have only the status of recommendations and conference organizers are not obliged to take them into account. These guidelines were not developed by GENERA but have received support from GENERA and more attention due to GENERA (IP4, IP7).</p>
sustainability	<p>As the GEP was still under discussion at the time of the site visit and no date has been fixed with the management to negotiate the GEP it was not clear whether the GEP will be approved and whether all proposed objectives and measures will be accepted by the management board. Nevertheless, the management is expecting to have a new GEP at the end of 2018 or the beginning of 2019 latest.</p> <p>The implementation manager who was hired on a fixed term contract for the GENERA project and has coordinated the implementation of the current GEP and the design of the new GEP and has brought a lot expertise on gender equality to the IAC has found a new employment and therefore left the IAC even before the end of the project. The acquired experiences, network contacts and know-how of this person will therefore not be available for finalizing the GEP and its implementation from 2019 onwards. Furthermore, several interviewees mentioned that it will not be possible to hire someone new for the remaining project runtime. Therefore all coordination work needs to be done by people who are not able to commit to the GENERA project work fully as they have other responsibilities and tasks to perform (IP3).</p> <p>During the runtime of the GENERA project the IAC has applied for the HR Excellence in Research Award. The internal assessment as well as the action plan builds on results and discussion stemming from the GENERA project. Therefore this can be a possible avenue for supporting the sustainability of the GEP and activities started in the course of GENERA (IP3).</p> <p>Furthermore, if a new position for promoting gender equality will be introduced at IAC this will foster the sustainability of GENERA actions and results. If there will be no position for promoting gender equality introduced the GE commission will be responsible for implementing and developing actions alone. As the GE commission is based on voluntary work it will be very hard to keep the momentum of the GENERA project – although the committee is composed of committed employees.</p> <p>Some interviewees also mentioned that sustainability could be ensured through a new project that will enable IAC to continue the efforts started in GENERA (IP5). Sustainability is therefore often perceived as not really an internal task of consolidating efforts and results of GENERA but something</p>

	that can only be guaranteed through additional external funding.
Policy learnings	More attention needs be drawn on sustainability issues. It seems that these are not perceived as part of the GENERA project but more as part of a new project that still needs to be funded. Therefore it seems highly advisable to develop sustainability plans from the beginning on in such projects and to continue to develop and implement them throughout the project.

## 9. National Institute for Nuclear Physics (INFN)

Table 7: Sample ex-post interviews INFN

All	Management		HR		Gender Equality Officer		Others		GENERA Team Member <sup>14</sup>	
	F	M	F	M	F	M	F	M	F	M
8	2	4							1	1

Organizational perspective is well represented due to high number of interviewees at management level.

Status GEP	INFN developed no GEP within GENERA as a GEP was in place in the GENERA runtime and a new one is currently negotiated.
Implementation of old GEP	<p>Thus the main aim within GENERA was to learn from other organisations and include this knowledge in ongoing activities, but also feed them into the new GEP (IP61). The GEPs are developed by the CUG (equal opportunity office) whose head was also the Implementation manager of GENERA. Thus the activities on GEP were often closely linked between CUG and GENERA. The content of the current GEP included the following measures:</p> <ul style="list-style-type: none"> <li>• Mentoring Program: even though there were initial doubts about implementing it, the experiences from partners within GENERA led to its implementation within the project runtime (IP61).</li> <li>• For raising awareness the management asked CUG to prepare a document on unconscious bias (only in Italian) which is promoted throughout the organisation, mainly in selection committees and upper organisational levels (IP63); No trainings are offered yet but they are an idea (IP61, 69).</li> <li>• Outreach activities: Master classes were organised for women only. One masterclass was only for elementary children because “<i>they start there to have a bias</i>” (IP61). Due to some critical voices, a new approach could be to have mixed classes but only female tutors and to talk about gender issues. At the Gender in Physics Day, these actions in schools were presented. This format will be realised also in the future (IP64).</li> <li>• Childcare: increased efforts (IP61).</li> </ul>
Activities and discourses in / related to GENERA	<p>Within GENERA one of the primary targets was to raise awareness, <i>within</i> INFN but also outside, mainly <i>in schools</i> in order to increase the number of girls interested in physics. You “<i>have to start changing things there, in the mind of women and men that are working there.</i>” (IP61)</p> <p>Within INFN, awareness raising happened mainly at the top management</p>

<sup>14</sup> All interviewees who are GENERA team members are listed here and not in another function that they might also cover, e.g. GE Officer or HR manager

	<p>(president, directors): therefore GENERA provided arguments and support for discussions, the following topics were accelerated:</p> <ul style="list-style-type: none"> <li>• Fair selection process: Competitions for recruiting new researchers at INFN by law need to be done in a double written test. As the results of the last competition showed bad results for female applicants, improvements were necessary. After internal analysis and awareness raising on gender fair selection processes, new rules were defined in a written document (IP69).</li> <li>• Excellence was discussed in two respects: A discourse was started on the way how men and women are able to express their contributions to excellence, referring to capacities. Another discussion about ‘mobility’ as a criterion to assess the applicants’ excellence was stopped: since GENERA discussed mobility as factor disfavoring women, the mobility criterion was rejected as element of excellence within INFN (IP61); GENERA here provided an opportunity to critically reflect the concept of excellence (IP62, 69).</li> </ul>
Measures planned	<p>Ideas about the next GEP include:</p> <ul style="list-style-type: none"> <li>• Monitoring: currently actions are not monitored, for the next GEP a Monitoring Tree may be included (IP61).</li> <li>• Grants for women only: An idea is to introduce quota which are not named as such, like have a sort of “double-step grant” in which everyone is considered in the first round but in the second round a number of grants is reserved for women only (IP61; IP62).</li> </ul>
Most challenging	<p>After raising awareness of upper organisational levels and involving the management still it is not entirely clear for top management how it proceed further, a need for specific actions/plans and a list of recommendations was formulated by members of the top management (IP63) .</p>
Success/support factor	<ul style="list-style-type: none"> <li>• Interviews (ex-ante) helped to raise awareness about the problems. Interviews are considered as very useful to get (top management) people involved and may be continued after GENERA (IP61).</li> <li>• Extensive support from a female member of top management helped to push issues like unconscious bias and transparent recruiting procedures.</li> <li>• GENERA shows situation in different organisations/countries, so you can share methodology, provide starting points etc. (IP63).</li> <li>• Better data availability: GENERA as good starting point to address this issue in science, <i>“if you don’t have the data you cannot address the issue”</i> (IP62).</li> <li>• Format of GENERA as project made it more approachable for physicists as they can relate to project-structure (IP62), this makes efforts sometimes easier than with regular committee.</li> <li>• Gender-neutral language: increased awareness also among male colleagues (IP62).</li> </ul>
Hindering factors	<ul style="list-style-type: none"> <li>• Time issue: Only towards the end the team was really well working: <i>“I think that GENERA should last at least 6 months more. Because now we really are in the heart of the project.”</i> (IP61).</li> <li>• GENERA is considered as a good starting point for collecting the necessary data but does still not provide sufficient specific recommendations for actions (IP63) nor legal requirements and</li> </ul>

	<p>recommendations.</p> <ul style="list-style-type: none"> <li>• Quota in committee face limitations: due to low number of female candidates often the same names proposed (IP64).</li> <li>• Impact within organisations was limited due to weak role of INFN within consortium (no WP lead, IP64).</li> </ul>
Impact achievements /	<ul style="list-style-type: none"> <li>• Increased awareness thanks to GENERA (IP62): A European-wide project including the main players in the field helps raise awareness within the organisation and at top management, but also at national level (gender-in-physics-day).</li> <li>• Attitudes of management could be changed, e.g. gender neutral language is now in place (but still lack of actions).</li> <li>• New selection procedures were agreed on what is perceived as formal success (IP69): increased transparency and new guideline for selection rules, eg. how to nominate committee members, need to read unconscious bias paper.</li> </ul>
Broader impact	<ul style="list-style-type: none"> <li>• Network on gender-supporters strengthened within INFN: within and around GENERA project there are many people /women with the same ideals which is motivating (IP62).</li> <li>• National collaborations strengthened (CRN–INFN), related to the gender topic in general, but in particular to gender statistics.</li> <li>• Insight that other organisations (within GENERA) face similar or even worse problems (IP61) is encouraging to continue.</li> </ul>
sustainability	<ul style="list-style-type: none"> <li>• IP61 suggests to keep at least some meetings or network between departments and/or IMs also after GENERA.</li> <li>• Unconscious bias paper (provided by CUG): formalized procedure approved by the board of directors, committees have to read this (IP62).</li> </ul>
Overall learnings	<ul style="list-style-type: none"> <li>• National discourse and awareness raising was stimulated (by comparisons, exchange of approaches, experiences, ...).</li> <li>• Very innovative approach how written tests can be done in a gender sensitive manner may be an example for other partners who aim to improve job competitions.</li> </ul>
Policy learnings	Quota might be needed to bring change.
General assessment	Personal and strategic overlap of GENERA and CUG activities makes it difficult to identify and isolate GENERA impact, but are on the other hand an example how these two levels of GE interventions can co-exist. Still, the newly introduced measures and the ongoing discourses, e.g. on excellence, capacities, etc are not systematically linked which could and should be done in the new GEP.

## 10. Jagiellonian University in Krakow (JU)

Table 11: Sample ex-post interviews JU

All	Management		HR		Gender Equality Officer		Others <sup>15</sup>		GENERA Team Member <sup>16</sup>	
	F	M	F	M	F	M	F	M	F	M
6	1	1					2		2	

Status of GEP <sup>17</sup>	<p>A GEP is currently developed by Implementation Team but not yet approved by relevant decision makers. The implementation team has recommended measures to be part of the GEP but not made a decision yet. Some measures are foreseen to be implemented in the physics department and if successful they will be implemented for the whole university. Furthermore, some measures were specifically recommended for the whole university which will be forwarded to other teams (especially to the one responsible for implementing activities related to the HR in excellence logo) and to the university authorities.</p> <p>A feedback comment by the JU implementation team mentioned that the legal form of the GEP and who will be responsible for its approval is still discussed and decided by experts of the legal department of JU.</p>
Content GEP	<p>The recommendations for a GEP contain four main interventions, at the Faculty and University levels. Here, only recommendations for the Faculty of Physics will be presented. Those include:</p> <ol style="list-style-type: none"> <li>1. Establishing an anti-discrimination policy           <p>One pillar are anti-discriminatory trainings which will target employees but also students at the Faculty of Physics at JU. At some point the possibility of introducing a new job position (an Ombudsman who could be contacted in cases of conflicts, mobbing or sexual harassment), was discussed. This person of trust could be approached by students as well as employees of the Institute of Physics. If this works out, it could be implemented for the whole university (IP1, IP2). But in the interviews different concepts of this trusted person were evident. Representatives from the physics department mentioned that it should be someone from the physics community who is very much trusted among its members and who should resolve conflicts but should also council colleagues who are experiencing stressful situations related to work, private life and health (IP2, IP3). But a trusted person from the physics community can easily get into a conflict of interest him- or herself due to the confident information he</p> </li> </ol>

<sup>15</sup> researchers, gender experts, former management staff, policy makers

<sup>16</sup> all interviewees who are GENERA team members are listed here and not in another function that they might also cover, e.g. GE Officer or HR manager

<sup>17</sup> The interviews with representatives from JU were conducted between June 4th and 8th 2018. Therefore the assessment does not comprise the latest developments between June and end of August 2018.

	<p>or she receives in the course of his/her work as an Ombudsman. To avoid such conflicts of interest it seems advisable to hire someone from outside of the physics community with relevant trainings, skills and experiences for this kind of social work. To some extent Rector's Proxy for student safety and security acts as a person of trust for the whole university and reacts to cases of harassment, sexual harassment and other forms of misconduct related to the feeling of safety. Sometimes (despite the name of the position) the proxy acts also in employees' cases.</p> <ol style="list-style-type: none"> <li>2. Improving childcare support for employees with young children One measure discussed is establishing a kindergarten at the JU campus. Although there is already one kindergarten the demand is high, the waiting list is quite long and it is not really affordable for everyone (IP1, IP3, IP6). Another suggestion for the GEP is to promote already available infrastructure like parenting rooms at the campus more widely, so that more people are aware of these opportunities and will make use of it in the future (IP2). An additional suggestion from interviewees was to clarify the rights of women on maternity and parental leave and to provide transparent information for all employees and students alike on this matter.</li> <li>3. Understanding the reasons why men and women resign from an academic career A survey should be conducted to understand the reasons why men and women are leaving the university or their PhD studies. Survey will include questions on micro-agressions and experiences of discrimination during studies and/or work and aims at developing recommendations for gender equality/antidiscrimination policy at the JU.</li> <li>4. Promotion of women's achievements and visibility: Making women in physics and their achievements more visible is foreseen as another GEP objective.</li> </ol> <p>It seems that the ideas of introducing an Ombudsman and extending childcare facilities at the JU campus are very much appreciated by members of the physics department. They perceive this as very valuable and supportive for their careers (IP3, IP6).</p>
<p>Process of (GEP) <b>design</b> – descriptive</p>	<p>For developing a GEP an implementation team has been set up. It consists of GENERA team members, the Vice Rector for Research and Structural Funds, the Rector's Proxy for Student Safety and Security (who is also responsible for gender equality issues at the university), the Director of the Central HR-department, the Dean of the Faculty of Physics, Astronomy and Applied Computer Science, the Director of the Institute of Physics, a representative of employees and a representative of PhD-students of the Institute of Physics (IP1).</p> <p>The implementation team was established with the support of the Vice Rector for Research and Structural Funds who is a trained physicist and who signed an official letter of invitation. He also was very supportive in the meetings and stated his support and commitment openly which also helped to engage all other participants (IP1).</p>

	<p>The GENERA team has summarized the results from the status quo assessments and developed some recommendations for JU. At the GIPD as well as in the following implementation team meetings these results and recommendations were discussed. Based on consensual recommendations the GENERA team has developed more concrete suggestions for solutions and measures to be implemented. These were already discussed by the implementation team (see above). As next steps it is foreseen to compile a comprehensive GEP draft which will be then discussed and agreed on in the next implementation team meeting.</p>
Process of implementation – descriptive	<p>No implementation has taken place yet as the GEP is still under development.</p>
Most challenging	<p>One challenge faced by the GENERA implementation team was getting access to relevant data for the status quo analysis. In order to gather relevant data several offices had to be contacted which was quite time consuming and inefficient.</p>
Hindering factors	<p>The lack of awareness for gender inequalities in physics and for the relevance of measures to promote gender equality was the most important obstacle to implementing the GENERA project and to developing a GEP. The physics community perceives itself as meritocratic where gender or sex are not influencing assessments or behaviours. Especially the results of the qualitative interviews which show a climate of micro-aggressions against women were doubted or not recognized by members of the physics community. In their view women are not “oppressed” by their male colleagues and men and women are treated equally. Gender inequalities are perceived as something natural or as originating from societal influences like childcare and family formation but are not part of the working culture of the physics institute (IP1, IP2, IP3, IP4).</p> <p>The resistance against the GENERA project was uttered openly in the course of the GIPD on social media but also during the event in the formal speeches of participants as well as in informal conversations (IP1, IP2, IP5, IP6). Also the date chosen for this event – International Women’s Day – was heavily criticized as a day that signifies the fight of women against oppression. This made it look like that female physicists were oppressed by their male colleagues which in the perception of physicists is not the case.</p> <p>Possible causes for this resistance against the GENERA project and its objectives can be attributed to the following issues:</p> <ol style="list-style-type: none"> <li>1. The GENERA project was carried out by the Institute of Sociology but the field of intervention was the Institute of Physics. At the beginning the colleagues of the sociology department were perceived as outsiders or intruders into the field of physics (IP2, IP5). For the representatives of the physics institute it was not clear in the beginning what their role and benefits will be in the GENERA project. There were discussions between the two groups about the use of resources and why there are no resources available for the physics department. This should be solved by hiring someone from the physics</li> </ol>

	<p>department for the GENERA project but although some colleagues applied for the open position nobody wanted to take this position in the end – also because the salary would have been rather low (because not a lot of resources were available). Therefore nobody was hired (IP1).</p> <p>2. In Poland a strong opposition against the term gender is widespread. It is perceived as part of a (radical) feminist language which promotes a fight of women against men and which tries to overthrow the traditional order of the Polish society. Therefore the term gender is perceived as an ideology but not a scientific term and its usage yields resistance and opposition. For instance, in one interview the GENERA activities were described as producing problems for men and bringing up issues that actually do not exist or are not incidents of gender inequalities (IP4, IP6). Physicists were perceived as more competent to identify the real problems as they know much better how the work is done in their institute (IP4). Of course, from a gender studies viewpoint this can be understood as a lack of awareness for gender inequalities. But it might also be related to different concepts of equality between men and women. The sociological language was not understood by physicists and seen as not describing their experiences. The sociological terms and the gender study theories were kind of foreign to the language of the physicist. Again the strong refusal of the term gender was at play here.</p> <p>Nevertheless it seems that these misunderstandings could be resolved and to some extent they have been already settled due to the mutual cooperation and understanding. Consensual collaborations between the Institute of Physics and the Institute of Sociology are planned – compare above point 3 of the GEP (surveys).</p> <p>Besides the lack of awareness another obstacle was that stakeholders at the JU were showing a lack of agency as they perceived specific problems of gender equality as not within the realm of their assignment (IP2).</p> <p>Furthermore, resistances were also voiced against specific measures like quotas which try to increase the number of women through targets or preferential treatment. These measures are seen as special treatment of women and to discriminate men (IP4, IP5).</p>
<p>Success/support factor</p>	<p>The most important factor of success was the support of the GENERA project by the Vice Rector for Research and Structural Funds. From his commitment and support the GENERA team could draw strength and legitimization for its own objectives and activities. In the interviews it was emphasized that he was a physicist too. Therefore he was recognized by his colleagues in the Institute of Physics as someone belonging to them and not as a foreigner or outsider as the colleagues from the Institute of Sociology. The members of the GENERA team emphasized that through his support the cooperation with representatives of the Institute of Physics became much easier. But also the Rector’s Proxy for Student Safety who is also responsible for gender equality issues especially for measures against gender based violence was an important supporter of the GENERA project</p>

	<p>(IP1, IP2, IP5). At the point of the site visit it seemed that good collaborations between the representatives of Institute of Physics and the colleagues from the Institute of Sociology had been established based on common objectives as well as on a mutual understanding. Nevertheless there are still differences in the perceptions of the organizational culture and practices but these differences do not inhibit cooperation.</p> <p>Another reason for the support from the rectorate of the university for the GENERA project was that the university has implemented the “European Charter for Research and Code of Conduct for the Recruitment of Researchers” and has gained permission to use the “HR Excellence in Research” award logo since December 2017. In this application the university had to commit to promote gender equality and to implement specific measures. Therefore gender equality was already on the agenda of the rectorate of the university. The GENERA project was an opportunity to get support for implementing such measures and to show that its commitment to promoting gender equality is taken seriously (IP1, IP2, IP5).</p> <p>One incident at the GIPD was mentioned in some interviews, namely when a young female PhD student stood up and reported about the mobbing she is experiencing in her group. In the perspective of some interviewees this very emotional moment of the event contributed to making some members of the physics institute more aware of issues like mobbing and micro-aggressions in their institute. This moment was described as an eye opener and has facilitated discussions in the implementation team about measures to prevent such behaviour and to support its victims (IP1, IP2, IP5).</p>
<p>Impact / achievements</p>	<p>Setting up a GEP implementation team comprised of relevant stakeholders from the top level management of the university as well as from the institute of physics. This has to be seen as an important achievement.</p> <p>Another achievement was the establishment of well functioning collaborations between the Institute of Sociology and the Insitute of Physics. This was the foundation for developing a GEP – although the GEP is not approved yet but it seems very likely that it will be approved soon.</p> <p>The measures proposed for the GEP seem to resonate with the needs of the physic community. Measures which are not accepted by its members were not included into the GEP. Therefore it can be expected that the GEP will be supported. The approach that the physics field is a test case for the GEP who will then be implemented on the level of the whole university is also strategically well chosen.</p> <p>Another result that is related to the GENERA project is the plan to introduce a new survey or to extend an existing survey of PhD students and employees to identify the main reasons for leaving the university and academic science.</p>
<p>sustainability</p>	<p>The support of the vice rector who is reported to be really committed to developing and implementing a GEP for the Institute of Physics but also for</p>

	<p>the whole university is a very strong sign that the actions started in the course of GENERA will be continued and followed up after the end of the project.</p> <p>At the Institute of Physics a person has been defined who will be responsible for implementing the GEP. It will be important that this person will not only have the portfolio to implement such actions but also the necessary expertise e.g. know how on gender equality issues.</p> <p>Another important requirement for GEP implementation are resources. At the point of the site visit it was not clear where the resources will come from – whether the university or the Institute of Physics will have to provide the money to finance the measures foreseen in the GEP. This needs to be clarified in the discussions about the GEP. Otherwise - although the GEP might be approved by the management - it is not very likely that the measures will really be implemented. In the course of the feedback from the Implementation team at JU it was mentioned that the Faculty will most likely provide the financial resources to implement the GEP but a final decision on this issue was still outstanding.</p> <p>The future of the implementation team was also not clarified at the time of the site visit. It seems that this group of stakeholders is working well and that it could be very beneficial for the university and for the institute of physics if this group will continue to meet and work on gender equality issues. This might also be an opportunity to build on the expertise of the GENERA team also in the future. One suggestion could be to involve the GENERA team members in monitoring the implementation process of the GEP in collaboration with the Centre for Evaluation and Analysis of Public Policies on the one hand and of the status quo of gender equality at the Institute of Physics and for the whole university on the other hand.</p>
Overall learnings	<p>The case study shows very clearly how important the support from and the commitment of the top level management is for developing a GEP and to promote gender equality.</p> <p>On the other hand it also provides evidence how complex and sensitive interventions to promote gender equality are in cases where gender equality experts are not part of the field or organizational unit which are chosen for implementing such actions. This can be perceived as an intervention from outsiders who do not speak the language of the community and do not understand its culture. To avoid opposition and resistance it is important to establish a mutual language and trust between the parties involved.</p>

## 11. Karlsruhe Institute of Technology (KIT)

Table 12: Sample ex-post interviews KIT

All	Management		HR		Gender Equality Officer		Others <sup>18</sup>		GENERA Team Member <sup>19</sup>	
	F	M	F	M	F	M	F	M	F	M
6	1				1		1		3	

Status GEP	No GEP was developed within GENERA as a GEP is currently in place.
Content GEP	<p>A GEP (“Chancengleichheitsplan”) existed at KIT already prior to the GENERA project as this is obligatory in Germany for research organisations. This GEP is monitored regularly in order to improve measures. A new GEP will be designed next year. The GENERA project was expected to provide further input and ideas on how to effectively design and improve the future GEPs (IP81, 82, 83). New knowledge within the GENERA project was generated when KIT was responsible for developing tools in WP4 to support the IMs:</p> <ul style="list-style-type: none"> <li>• Developing a Toolbox for Gender equality measures, mainly derived from successful examples of other organisations (IP82).</li> <li>• Coming up with a Roadmap for implementing a GEP; it lays out the separate phases of implementing a GEP and acts as guideline – from the analysis phase up to monitoring and evaluation.</li> <li>• Developing a Mobility Action Plan.</li> </ul>
Process of (GEP) design – descriptive	<p>The process of designing the existing GEP and specific measures was described as rather intuitive and unstructured.</p> <p>As for the next GEP, lessons learned from the current GEP as well as from experiences within GENERA will be accounted for. The steps of the planning phase have become clearer due to these previous experiences and a preliminary plan is already set up (IP81). The GENERA monitoring tree is used to align measures and targets and provide a new focus.</p>
Process of implementation	The process of implementing measures within the GENERA project started off very slowly. Especially within the first 6 months there was a lot of confusion and scattered efforts that led to inefficiency and wasted time (IP81).
Most challenging	<ul style="list-style-type: none"> <li>• Communication and information flows (IP1).</li> <li>• Insufficient management structure in the project: not enough guidance, a lot of unnecessary work (IP1).</li> </ul>
Success/support factor	<p>GEPs are obligatory in Germany so there was no need to argue about that (IP1); Thus, data availability has become standard to consider gender distribution (IP1).</p> <p>Some tools developed in GENERA are perceived as really helpful: the roadmap and the monitoring tree: the latter supports the acceptance within the organisation and its management and further acts as useful visualisation tool (IP81).</p>

<sup>18</sup> researchers, gender experts, former management staff, policy makers

<sup>19</sup> all interviewees who are GENERA team members are listed here and not in another function that they might also cover, e.g. GE Officer or HR manager

	For the work in KIT the shared experiences and examples from other organisations helped in gathering ideas, but also showed some of the pitfalls and how to deal with internal resistance (IP82).
Hindering factors	Mainly issues related to the project organisations were mentioned (not related to IM work): It took a long time to even get the tasks within GENERA running as there were a lot of disorganised actions going in different directions in the beginning. A lead time to prepare could have prevented the confusion in the beginning of the project runtime and would lead to more efficient time use (IP81). Further, the work packages were not sufficiently linked: deliverables within sometimes seemed random or overlapping (IP82). A lack of a clear goal and direction of the GENERA project (IP82) was hindering all the runtime of the project. One big questions is still unsolved, namely that are physics-specific measures and if such measures are necessary at all (IP83).
Impact achievements /	<ul style="list-style-type: none"> <li>• Within KIT, an increased contact of GENERA team members to physicists on the gender topic could be successfully established. But the contact person on gender issues will leave after GENERA, so at the moment it is not clear who then is contact person for physicists.</li> <li>• As gender monitoring is well established at KIT, further impacts on structural change could not be observed / achieved in the GENERA runtime (IP81, 82, 86).</li> </ul>
Broader impact	Within physics field reflection and awareness about gender issues increased, more knowledge on the topic was gathered (IP81).
Sustainability	<ul style="list-style-type: none"> <li>• Externally, the creation of a network with partners such as MPG and DESY in general and on gender topics (IP82) will sustain.</li> <li>• Internally, the results and outcomes of GENERA, like the toolbox, should be made available easily (IP85).</li> </ul>
Overall learnings	On a quite high level of gender awareness further progress is difficult to make.
Policy learnings	To encourage and stimulate mutual learning between European partners appropriate formats need to be established within a consortium.
General assessment	GE is highly institutionalized and prioritised within KIT; a variety of measures are implemented and various actors are active in the field. The strategic focus of the GE work and the responsibilities are not always clear.

## 12. Max Planck Society (MPG)

Table 13: Sample ex-post interviews MPG

All	Management		HR		Gender Equality Officer		Others		GENERA Team Member	
	F	M	F	M	F	M	F	M	F	M
6					4				1	1

It was not possible for the MPG GENERA team to schedule interviews with representatives of the management of MPG or the participating institutes; this was argued with time restrictions.

Status GEP	At the time of ex-post interviews a GEP was signed in one institute, while in the three other units negotiations were still ongoing or the GEP was in preparation (drafted). Yet the interviewees are positive that all four GEPs will be signed by the end of GENERA.
Content GEP	The content of the GEP is developed by the GEO, mainly based on their former targets; it is not clear to what extent the measures reflect the ongoing activities and to what extent new ideas were picked up. The signed GEP includes: measures for better data, measures to support of parents (parents room), awareness raising measures: seminars to discuss gender-related issues, more women at conferences and seminars and measures to improve hiring procedures. The GEPs still in negotiation include measures to increase of gender awareness, for child care (facilities), a Code of conduct, compulsory anti-bias trainings and measures for transparency in hiring procedures and increased visibility of women (videos women in physics).
weaknesses	GEPs include responsibilities and requested budget, but have not measurable targets, no monitoring and target/measures are not directly linked to status quo data. No monitoring established yet.
Process of (GEP) design	In MPG, all institutes have to implement a GEP due to internal GE policy. From the 3 physics institutes participating in GENERA, one is geographically divided and so 4 entities aimed to develop a GEP within GENERA. GEPs are an instrument well known at MPG as already in 2008, the MPG management in line with the central EOO (now also the leader of the GENERA team) decided that all institutes need to have a GEP. GEPs are implemented by the regular equal equality officers (EOO) who are installed in each institute, together with a deputy EOO, both working on a honorary basis, without specific time dedicated to this work. They have a limited budget provided by the institute. Within GENERA one GENERA team member was supervising (IM-supervisor) the EOOs in the institutes working on a GEP. So the GENERA IM was not directly designing GEPs, but supporting the four EOOs when preparing their GEP. A delay was reported due to change of IM-supervisor: The first one has promised specific surveys that were never realised. Her successor was perceived as very supportive by the GEOs. Yet it was mentioned that the Interlink between GENERA and the GEP most of the runtime of GENERA was not well established in terms of knowledge transfer, only in the last month this was more fruitful. In general GENERA was only little visible within MPG

	<p>(IP94, 91, 96).</p> <p>Another reason for the delay in the implementation of GEPs at MPG might have been that the IM-supervisor was at the same time heading the WP4 and by this, had to focus on specifying the role of the IM in the project, but also provide some guideline how to structure the IM process – as support for all other IMs.</p> <p>The EOOs suggest the content of the GEP which is developed and negotiated with various stakeholders in the institute (eg. working council). The GENERA IM supervisor provided support in the design phase of the GEPs in various ways (process knowledge, suggesting measures, producing GEP). The finale draft version of the GEP is presented to the director of the institute for feedback and signature, usually there are no comprehensive negotiations with the directors. Sometimes directors reject GEPs for revision (eg. to delete measures).</p>
Process of implementation	Measures agreed on or also already implemented are integrated in the GEPs, their implementation is ongoing. New measures included in the GEP have not been implemented yet as this one was just signed recently.
Most challenging	<ul style="list-style-type: none"> <li>• The link between GENERA team to EOO was a challenge to establish: it was unclear how the process works and which support GENERA provides for the EOOs (IP91, IP95). In the initial phase of the implementation process, the latter noticed a lack of communication and knowledge transfer in terms of which measures to choose (IP94, IP91).</li> <li>• Bottom-up-approach ('from physicists to physicists') is a challenge as IMs need complex competences – those were not always available, e.g. being trained in negotiating with professors (IP92). At the same time it is obvious that time and expertise of EOO lack when they work on a honorary basis (IP92, 93, 95).</li> </ul>
Success/support factor	Support from second IM supervisor was appreciated by the EOOs, they could increase their Know how on implementing GEPs.
Hindering factors	<ul style="list-style-type: none"> <li>• After the first IM supervisor left, the implementation process was not started yet and only a year was left for the design and implementation of the GEPs.</li> <li>• Knowledge already developed in other structural change projects is not (made) available for ongoing projects (IP91).</li> <li>• Lack of gender expertise in GENERA consortium.</li> </ul>
Impact / achievements	<ul style="list-style-type: none"> <li>• The GEPs had to be implemented within MPG anyway, GENERA provided tools and knowledge how to organise the process and measures that have already been applied in physics (toolbox).</li> <li>• Cooperation of central EOO and EOOs in institutes was intensified as well as the relation of central EOO to statistical office.</li> <li>• During negotiating GEPs in the institutes the topic of transparency in hiring procedures has been brought up as a topic that can be discussed in the next years. (IP 92, 95).</li> </ul>
Broader impact	Visibility of central EOO on international level increased due to invitation to other institutes (to present GEPs as instrument already agreed on within MPG).
sustainability	<p>Process of designing a GEP is now clearer, this knowledge can be used for next GEP design.</p> <p>A network to different GENERA partner was established that can be used for further projects.</p> <p>Dealing with Gender in a European perspective brings new insights (IP91).</p>
Overall	IMs need clear plan about their role from the beginning and also

learnings	expertise/knowledge how to do it.
Policy learnings	Significance of a funded GERI-project within an organisation should be ensured.
General assessment	Against the background that MPG had to be designed and implemented anyway this good start position was not fully transferred into successfully implemented GEPs. But after delay in the start phase, signature of all four GEPs seems still possible.

### 13. Institutes Organisation of the Netherlands Organisation for Scientific Research (NWO-I)<sup>20</sup>

Table 14: Sample ex-post interviews NWO-I

All	Management		HR		Gender Equality Officer		Others <sup>21</sup>		GENERA Team Member <sup>22</sup>	
	F	M	F	M	F	M	F	M	F	M
9	2	4	-	-	-	-	1	-	2	-

Status GEP	<p>All four institutes participating in GENERA have signed an individual GEP publicly at the national physics conference “Physics at Veldhoven” in January 2018. In most cases this signature was seen as a starting point for increased gender awareness within the institutes.</p> <p>A next challenge will be to link and align the GEPs with the Diversity strategy of NWO that was recently launched, covering the whole organization (IP101).</p>
Content GEP	<p>The GEPs address different target groups, focusing specifically on research group leaders (except ARCNL). Measures often focus on</p> <ul style="list-style-type: none"> <li>• active scouting for women</li> <li>• Unconscious bias/changing traditional gender roles. The content covers:</li> </ul> <p><b>ARCNL</b></p> <p>In order to remove barriers in recruitment and career progression of female physicists two sub-goals have been formulated in the GEP: First, more female physicists will be scouted and recruited. Second, equal opportunities for career progression will be established. In general the proportion of female scientific junior scientists is planned to be increased up to 30%. In terms of female group leaders the objective is to reach 20% in 2022. Concrete measures on order to achieve this goal include gender-sensitive recruiting guideline, as job advertisements and the institutes website will be checked for linguistic gender-coding (via manuals, interactive websites and communication experts). In order to provide senior female role models, a representative number of female speakers will be invited for scientific colloquia and to the advisory bodies. Unconscious bias trainings and mentoring programs for female scientists will be provided as well. Moreover ARCNL will continue to participate in the Women In Science Excel (WISE) program. To tackle the two-body problem, that often occurs when hiring group leaders, measures are planned that make it easier to take parental leave during the tenure track. Consequently tenure procedure can be extended by the amount of leave time taken (up to 6 month). In addition each tenure-track group</p>

<sup>20</sup> Before 2017: Foundation for Fundamental Research on Matter (FOM)

<sup>21</sup> researchers, gender experts, former management staff, policy makers

<sup>22</sup> all interviewees who are GENERA team members are listed here and not in another function that they might also cover, e.g. GE Officer or HR manager

leader is offered a personal coach, with whom he/she can reflect on work issues. To realize the measures formulated in the GEP a gender equality team (GET) will be established.

**AMOLF**

In the GEP AMOLF aims to change the current underrepresentation and increase the proportion of female scientific group leaders up to 25% until 2022. Similar to ARCNL job advertisements will be checked for linguistic gender-coding in order to achieve gender-sensitive recruiting guidelines. Measures in this context include actively scouting talented female researcher for tenure-track and other senior scientific positions. Additionally unconscious bias training will be held for all leading scientific staff. In order to achieve and obtain equal career opportunities AMOLF has formulated similar measures as the ARCNL, such as the possibility of prolonging the tenure track process when taking parental leave during this period up to a maximum of 6 month. Also each tenure-track group leader is offered a personal coach, with whom he/she can reflect on work issues. Through monitoring programs for female scientists AMOLF aims to stimulate young female scientists to pursue a career in science after obtaining their PhD or finishing their postdoc term. In addition to that senior female role models will be provided, for example through inviting representative numbers of female speakers for the scientific colloquia and by taking care that ~50% of speakers in their organized summer schools are women. As well as ARCNL, AMOLF will also continue to participate in the WISE program. Ultimately AMOLF established a gender equality team (GET) to realize the formulated objectives.

**Nikhef**

In the context of equal opportunities the Nikhef HR department has committed to monitor recruitment procedures and to guard the application of anti-discriminatory policies. Consequently job advertisements will be checked for linguistic gender-coding, with the help of manuals, interactive websites and communication experts. Nikhef plans to take steps in supporting initiatives that reduce gender bias (through trainings and workshops) and general support measures, such as stimulating talented female candidates to apply for female-only grants and fellowships. Moreover Nikhef offers regulations for maternity and parental leave, for working part-time, and for working flexible hours. A soon-to-be developed buddy system for PhD students will also focus on gender-related issues. As well as the two other institutes Nikhef aims to provide more female role models, concrete measures for that objective are not specified within the GEP. The commitment of engaging in the next round of the NWO WISE program is also formulated in the GEP. Nikhef has committed to increase the attention for a female friendly image within various communication channels through their communication department. In addition to measures that aim specifically at female staff members Nikhef provides personal career coaching for all senior staff members and hosts a 'grant office' that supports and guides all scientific staff members in the process of writing, submitting, presenting and defending grant proposals of all kinds, where specific attention will be given to female scientists.

	<p><b>DIFFER</b></p> <p>The general goal formulated in the GEP is to raise the percentage of female researchers by increasing the proportion of female group leaders and senior scientist up to 25% in 2022. In addition to the general goal the following sub goals have been specified. First the percentage of female applicants shall be increased by making the recruiting process transparent. Secondly awareness in favor of diversity shall be improved, as the visibility of female role models will be fostered and increased. Measures to achieve those objectives are included in the institute's diversity policy and are implemented and monitored by a specially formed Diversity Taskforce.</p> <p>In order to equally attract all applicants' job announcements will be improved in the sense that all vacancies will be posted on the institute's website and through applying job announcement guidelines to prepare gender inclusive vacancies. Additionally all job announcements are planned to be checked on gender neutral content and attractiveness for women by the HR department.</p> <p>In order to reduce gender bias within recruitment process selection committees will have at least one member trained in gender awareness issues. Furthermore DIFFER has committed to create institutional policies for the recruitment process by defining selection criteria in advance and by agreeing on a list of interview questions and scoring answers for each candidate. It is also envisaged that the same amount of time will be provided to each candidate and they are seen by two committees (BAC &amp; SAC). Ultimately preference is given to female candidates. In terms of data collection and monitoring the Diversity Task Force will provide data collected throughout the recruitment procedures on order to evaluate the recruitment strategies. Besides data collection statistics on diversity relevant recruitment will be presented and discussed at staff meetings. To reduce general gender bias (and other biases) Differ plans to organize workshops for all group leaders and heads of departments.</p> <p>On the level of policy and organization diversity awareness will be increased through the expression of norms via rules, laws and a code of conduct. In this context group leaders are held accountable for the implementation. Additionally all staff members will attend yearly lectures on diversity. Moreover DIFFER will continue to participate in gender awareness initiatives such as GENERA and will share best practices with other institutes. DIFFER has also committed to identify the reasons of employees for leaving the institute by administrating exit interviews as standard procedure.</p> <p>To foster and increase the visibility of female role models support will be provided to help researchers in the fields of building a network, research skills and grant applications. Also female guest researchers and professors will be invited to stimulate cooperation. Since cooperation and solidarity were both key points of the employee survey DIFFER will extend the introduction program and organize more informal meetings to raise inclusion and to further foster cooperation and solidarity.</p>
<p>Process of (GEP) design</p>	<p>GEPs were built very much on the advanced level of gender awareness already in the organisation and the institutes. Further, a strong support was provided from a member of the top management, so there was a fruitful, supportive environment already at the beginning. GENERA was perceived as chance to provide time, resources and expertise to implement GEPs in selected institutes. To develop a GEP, the GENERA IM</p>

	has set up IM-teams in each institute with strong involvement of the HR managers. Although it was challenging to schedule meetings due to limited time resources it finally worked.
Process of implementation – descriptive	Signature of GEP is perceived as starting point for implementation activities. Yet, some activities have been started before and thus their implementation is ongoing.
Most challenging	<ul style="list-style-type: none"> <li>• High communication effort from IM necessary to get 4 institutes to start working.</li> <li>• How to concretely implement activities is not clear yet.</li> <li>• No monitoring is established yet.</li> <li>• Not clear yet how GEPs are linked to Diversity plan of NWO within now.</li> </ul>
Success/support factor	<ul style="list-style-type: none"> <li>• Low number of female physicists gives push and enables support for activities.</li> <li>• IM team is a success factor as more people from different hierarchical levels are involved.</li> </ul>
Hindering factors in IM process Limiting factors for IM	<ul style="list-style-type: none"> <li>• Expectations at the beginning were too high, so a risk of disappointment existed (IP108).</li> <li>• Management structure within the consortium was sometimes hindering for further progress.</li> <li>• Time of IM for communication with institutes is limited. IM should not have others things to do, only implement.</li> <li>• Limited visibility of GENERA was reported from the institutes (IP102).</li> <li>• No continuity of implementation manager as coordinator of activities as project ends and no further project exists.</li> <li>• At the time GEPs were signed the responsible persons were not yet fully aware of the implications (IP106).</li> <li>• On a wider perspective, the European wide collaboration on gender in physics could not be established satisfyingly.</li> </ul>
Impact / achievements	<ul style="list-style-type: none"> <li>• Impact varies between institutes. But in general, knowledge on measures and how to implement them increased as time and know-how were available resources. GENERA provided insight how to push change at an organisational level.</li> <li>• GENERA helped change the atmosphere in the participating institutes and in overall organization (IP104).</li> <li>• GiPD helped to push the gender topic at national level in Physics.</li> </ul>
Broader impact	GENERA GEPs are now template for GEPs also in universities.
Sustainability	GEP makes responsible persons accountable for progress, but as long as no monitoring is established, sustainability is not guaranteed (IP108). Quality certificate for organisations which have successfully implemented GEPs would help.
Overall learnings	<ul style="list-style-type: none"> <li>• Raise gender awareness of (female) researchers before they do outreach activities at schools (to avoid that they present and thus reinforce gender stereotypes).</li> <li>• IMs need to be well experienced (know organisation, sell gender arguments well) so they and their work are accepted within the organisation.</li> </ul>
Policy learnings	<ul style="list-style-type: none"> <li>• GEP as a systematic instrument for change should be explained within the departments.</li> <li>• Learnings should be made available for further implementers.</li> <li>• Critical friend should be obligatory in each structural change project (IP 106).</li> </ul>

General assessment	Signing four GEPs is perceived as success, yet it is not clear how measures are put in action in practice, as responsibility, budget and target-indicators/monitoring are not defined.
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## 14. University of Geneva (UNIGE)

Table 15: Sample ex-post interviews UNIGE

All	Management		HR		Gender Equality Officer		Others <sup>23</sup>		GENERA Team Member <sup>24</sup>	
	F	M	F	M	F	M	F	M	F	M
5			1		2				2	

Status GEP	In accordance with national legislation the University of Geneva has implemented a gender equality plan. A new edition of the GEP has to be approved every 4 years. The new plan was established in 2017 is targeting the whole university. As a result of the GENERA project a GEP specifically for the Faculty of Science will be developed (IP1). At the time of the site visit the GEP was not approved by the management yet. It also seemed that interviewees had different perceptions whether a GEP specifically for the Faculty of Science will be developed (IP5, IP2).
Content GEP	<p>The proposed GEP by GENERA for the Faculty of Science at the UNIGE focuses on three main targets which address different fields of intervention according to the GENERA fields of action.</p> <p>Following targets are addressed:</p> <ol style="list-style-type: none"> <li>1. Support and motivate the promotion of female researchers</li> <li>2. Increase the intake of young female researchers in physics</li> <li>3. Remove the most significant obstacles to female researchers in physics</li> </ol> <p><b>1. Support and motivate the promotion of female researchers:</b> Recruit more female researchers and support the career of junior researchers:</p> <ul style="list-style-type: none"> <li>• Match young researchers with mentors who are not directly involved in their research activity or are not having any influence on their employment.</li> <li>• Create an online network of female researchers in Switzerland</li> </ul> <p>Ensure fair recruitment and selection processes:</p> <ul style="list-style-type: none"> <li>• The share of women in selection committees should be at least 30%.</li> <li>• The share of women on shortlists for professorships and other academic posts should be at least 30%.</li> <li>• Increase the transparency of activities of the planification commission through reports to the “collège de professeurs” and making relevant planification documents available to a wider audience of employees.</li> </ul> <p><b>2. Increase the intake of young female researchers in physics:</b> Promote the participation in outreach programs targeting schools:</p> <ul style="list-style-type: none"> <li>• Introduction of an award for researchers showing high commitment and efforts for outreach programs.</li> </ul>

<sup>23</sup> researchers, gender experts, former management staff, policy makers

<sup>24</sup> all interviewees who are GENERA team members are listed here and not in another function that they might also cover, e.g. GE Officer or HR manager

	<p>Promote role models and diverse representation of research:</p> <ul style="list-style-type: none"> <li>• Make successful female researchers and their work more visible within the university</li> </ul> <p><b>3. Remove the most significant obstacles to female researchers in physics:</b></p> <p>Ensure work life balance is equally manageable for men and women in the research profession:</p> <ul style="list-style-type: none"> <li>• Strive for an agreement between Swiss universities to facilitate dual career exchanges</li> <li>• Identify a room for extracurricular activities and infant care at faculty of science.</li> <li>• Negotiate creation of more kindergarten places near University of Geneva with the federal state of Geneva and change the rules of application for nurseries.</li> <li>• Enable reimbursement of costs for infant care due to unavoidable working related travels</li> </ul> <p>Examine the gender balance and monitor the definitions of excellence and possible career progression impediments</p> <ul style="list-style-type: none"> <li>• Continue to collect relevant data for gender equality assessments including demographical, educational, career progress and productivity data</li> <li>• Introduce a compulsory online course on recognizing bias and avoiding stereotypes</li> <li>• Conduct exit interviews with professors, in particular with women, leaving the Faculty</li> </ul>
<p>Process of (GEP) <b>design</b> – descriptive</p>	<p>The first step in developing a GEP was collecting and analysing organisational data on gender inequalities. This data collection endeavour is time consuming as most of the data needed by GENERA on career progress and academic records is not available at HR level. A survey had to be organized by GENERA which involved the HR department and the Commission d'égalité of the Faculty of Science (CEF), the equal opportunity committee of the Faculty of Science. Additionally privacy issues have delayed the data acquisition further.</p> <p>At the GiPD the results of the test survey were presented and discussed with the audience and experts. Important comments and feedback were received.</p> <p>Based on the results of the survey and on the discussions and comments at the GiPD a proposal and recommendations for actions were developed by the GENERA team – taking into account the different fields of actions for gender equality measures. These were presented to and discussed with the CEF. Therefore an implementation team as a group composed of representatives of different organisational stakeholders was not established to coordinate the GEP development.</p> <p>It was planned to amend the proposed actions to the GEP of the university of Geneva. But it seems that a new GEP for the faculty of science will be</p>

	<p>designed but which will have an informal character. Nevertheless, the equal opportunity commission will be responsible for implementing the GEP.</p>
<p>Process of implementation – descriptive</p>	<p>As already mentioned the staff data collected by the university was basically limited to demographical data and therefore the status quo assessment of gender equality was quite basic. Therefore the GENERA team designed a survey to collect more relevant data from different employee groups to be able to provide a more detailed status quo assessment. Before the survey could be sent out to employees it was stopped by the dean of the Faculty. It was suggested to merge this survey with another survey proposed by the CEF, which was under discussion for some time already and which had as primary objective to gather information about possible promotions. Although both surveys had quite distinct objectives they had to be integrated. Some people were pointing out that merging them would make them too long and complex and would result in low response rates and would therefore not produce statistically significant results. Nevertheless it has taken quite some time to merge these two surveys. The new survey was launched as a pilot survey in the Physics Department. As expected, the response rate was quite low and the sample consisted, mostly of PhD students. Therefore the results were hardly representative for the employees of the Physics Department. The results have been discussed with the CEF, the equal opportunity commission of the University and the gender equality officer and they were presented at the GiPD. Although no concrete policy recommendations could be drawn from the survey it was decided to extend the survey to the whole Faculty of Science. Again implementing the survey at the Faculty level was time consuming. Finally the survey was launched and stayed online a few months until it was closed at the end of June. The response rate seems again quite low (IP1, IP2, IP4, IP5) but much improved compared to the test survey, at least in the Physics Department. No results of the faculty level survey were available at the time of the interviews.</p> <p>A Gender in Physics Day was organized at the University of GENEVA.</p> <p>One GEP action was already implemented in during the runtime of the project: gender awareness and bias trainings which addressed different target groups: from PhD students to postdocs and permanent staff like professors etc. The training sessions were scheduled for three days, included a series of talks and workshops and were received very positively by the participants (IP1, IP4, IP5)</p>
<p>Most challenging</p>	<p>The lack of data collected by the university was a challenge as it did not allow a comprehensive analysis of the status quo of gender inequalities at the Department of Physics. Also the response rate of the employee survey conducted by the GENERA team was very low. Therefore only limited conclusions and recommendations could be provided (IP4).</p> <p>Another challenge concerned the communication and collaboration between the GENERA project team and the established gender equality stakeholders at UNIGE like the equal opportunity commission, the gender</p>

	<p>equality office, the dean or the HR department. Although several meetings between these different groups have been taken place to establish mutual understandings and to coordinate activities the collaborations was described as difficult, inefficient and uncoordinated (IP1, IP2, IP5). Other stakeholders like the HR department reported that they were not involved into the project throughout its entire runtime but only on very specific occasions. On the other hand the GENERA team reported that processes were not always transparent or understandable for them and they did not receive feedback on their suggestions and inputs for advancing gender equality at the Faculty of Science. Therefore opportunities to collaborate, to involve additional expertise or to gain support were missed. Particularly difficult was the involvement of the Rectorate on the GENERA topics.</p>
<p>Hindering factors</p>	<p>The lack of top down support in the Faculty of Science but also from its departments was mentioned frequently as a hindering factor in the interviews (IP5, IP2, IP4). Although it seems that there was a formal commitment from the top level management concrete support, engagement and the political will to introduce measures was missing. For instance, it was mentioned that the vice-Rector or other representatives of the management did not attend most of the GENERA meetings.</p> <p>Discussions and decision making processes were taking a lot of time and this delayed activities like the employee survey considerably. This is also due to the fact that the equal opportunity committee is meeting only twice a year for a quite short period of time. This makes decision making process quite lengthy (IP2, IP5).</p>
<p>Success/support factor</p>	<p>Although collaboration between the project and the organisational structures or stakeholders was difficult interviewees reported that a strength of the project was to be able to move more freely between these structures and actors. It was therefore able to make proposals for measures that would not have been possible otherwise.</p> <p>Support was provided by committed individuals like the head of the equal opportunities commission or the gender equality officer (IP4, IP5).</p> <p>Exchanging with implementation managers (IM) from other organisations involved in GENERA was helpful too. The IM meetings facilitate learning and transfer of experiences and know how. Also the GENERA toolbox and the GENERA monitoring tree were considered as useful for developing a GEP (IP4).</p>
<p>Impact / achievements</p>	<p>Although a lack of top down support and a difficult coordination between different stakeholders and the GENERA project was observable some considerable achievements can be reported: for instance the gender awareness trainings that have been conducted are important steps towards increasing gender equality through making employees more aware of this issue.</p> <p>Furthermore, it seems that the Faculty of Science has started to engage</p>

	<p>more into promoting gender equality although the status of the GEP measures was not clear at the time of the interviews. But it seems that at the end of the GENERA project the basis for promoting gender equality is more fertile now. Some interviewees also mentioned that more awareness of gender inequalities and the promotion of gender equality was visible in the department of physics (IP2, IP4).</p>
<p>sustainability</p>	<p>The principal investigator of GENERA at the University of Geneva is invited to join the CEF of the Faculty of Science (IP1). If this invitation is accepted it will facilitate knowledge transfer and exchange of experiences. It will also enable the GENERA IP to follow up on the activities and efforts started in the course of the project.</p> <p>Due to the lack of top down support some interviewees were sceptical whether the measures suggested in the GEP for the faculty will be implemented and enforced (IP2, IP5).</p>
<p>Overall learnings</p>	<p>Most of the interviewees in this case study emphasize the importance of top down commitment and support to implement gender equality measures. Otherwise all activities defined in the GEP are hard to realize. Therefore one interviewee suggested that in a future project the project should be managed by someone who holds a management position and who has the decision making power to implement specific measures like the dean of the faculty (IP2, IP5). Furthermore the responsibility for implementing such a project should be placed not on the shoulders of one person only who might have to face detrimental effects for his or her strive for changing organisational structures and cultures. Therefore it is recommended to involve representatives of different stakeholders in an implementation team which should be headed by someone with decision making power.</p> <p>Establishment of clear communication processes and responsibilities to enable a better and more efficient collaboration between the project team members and organizational actors. Furthermore it is advisable to include organisational actors or stakeholders as team members into the project. This would raise ownership of the project and its objectives but would also facilitate coordination.</p>

## 15. Conclusions

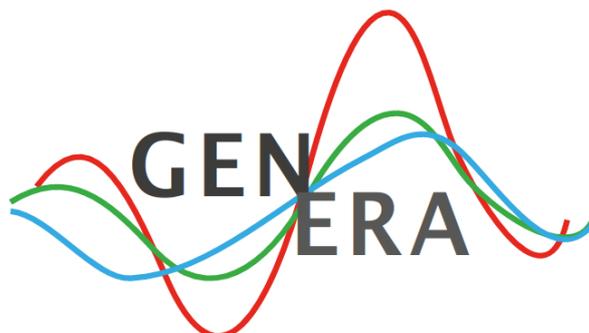
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As Critical Friend in the accompanying evaluation of GENERA implementation activities we could not analyse the implementation of gender activities due to a long phase of designing and setting up GEPs. But we were able to get deeper insights into the phase of negotiating a GEP, in particular in research organisations that have not developed GEPs yet. We learned to better understand why designing a GEP took more time than originally expected. Further we could study the challenges implementation managers face and the support they (would) need. In this context, the most relevant conclusions are:

- Starter organisation lack awareness of gender problems: IMs need to use the right arguments at the right time to raise awareness of gender issues in general but especially at senior management levels. The involvement of the senior management level has been crucial for successfully designing a GEP in all participating organisations.
- The structural change approach and the GEP as policy instrument need to be introduced in the RO as early as possible in the project. Especially in starter organisations the awareness and know-how about the aims and requirements of such an approach are low and need to be communicated clearly and understandable.
- IMs need various competences to navigate through the different challenges of a GEP design process. But they also need a position of power to be able to negotiate GEPs with the senior management. External expertise or coaching could support IMs .
- Starters may have slow progress because the function of IM is complex and requires various different competencies and know-how: on gender equality, organisational knowledge, gender equality & organisation, change processes, field specific culture; Further, (field specific) competence and knowledge how to do structural change IN PRACTICE needs time, training to be built up.
- It helped (but sometimes also challenged) that GENERA had an interdisciplinary team with different approaches and competences. This comprised interdisciplinarity within the GENERA project member organisations but also within these organisations where colleagues from physics, social sciences and administrative departments have been collaborating and communicating. This was not always free of conflicts and misunderstandings but also contributed to collective learning from the different perspectives, cultures and know-how.
- When RO are starters and/or IMs are starters, it might become really demanding to develop a GEP as it is not clear for them which targets should be set, which measures should be selected and implemented and which competencies will be needed to achieve the defined objectives and to implement the selected measures smoothly. Within GENERA, the GENERA Action Tree and Monitoring Tool was developed to provide content-wise guidance for developing a GEP but also to provide indicators to monitor and measure progress of implementation and gender equality in each organisation.
- Unconscious bias trainings and guidance how to adopt this in practice is an important step towards more gender awareness of all stakeholders involved. Therefore it seems advisable for starting organisations that such trainings should be implemented already in the awareness raising phase even before a GEP is developed. Participating in unconscious bias trainings should make the management more sensible and aware for gender inequalities in their organisations and consequently facilitate negotiation and priority setting processes.

- We found that women recommended for committees more and more show resistance to take over this quota-function. We see a need to provide training to women to make clear what the aim and benefit is of being in such a function, but also to men - how to approach the appointees.

Grant Agreement No. 665 637



**Gender Equality Network in the European Research Area  
Performing in Physics**

**Deliverable D 3.2**

**Ex-ante assessment report**

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GENERA Gender Experts Board only

<b>Work Package 3</b>	Monitoring and Evaluation: Develop and test a tool to monitor progress of gender equality
<b>Task 3.2</b>	Assessment of gender equality in participating research organizations
<b>Responsible Beneficiary</b>	Joanneum Research (Austria)

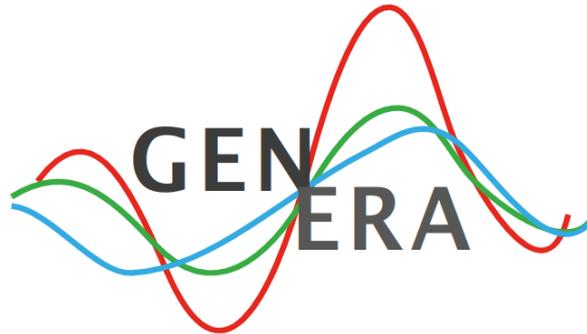
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## 17. Annex 2: Mid-term evaluation results

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### 17.1. Report on Evaluation sheet 1

Grant Agreement No. 665 637



## Gender Equality Network in the European Research Area Performing in Physics

*CONFIDENTIAL – for members of GENERA consortium only!*

### Report: “Still at the start?” - Analysis of evaluation sheet 1

August 2017

<b>Work Package 3</b>	Monitoring and Evaluation: Develop and test a tool to monitor progress of gender equality
<b>Task 3.2</b>	Assessment of gender equality in participating research organizations
<b>Responsible Beneficiary</b>	Joanneum Research (Austria): Helene Schiffbänker, Silvia Hafellner

This report is part of the accompanying evaluation within the GENERA consortium. It shows the results of the first interim-questionnaire which was sent to all implementation managers (IMs) in June 2017, reflecting the status quo of GENERA implementation process by the end of May (month 21 of 36 of the project runtime). An online questionnaire was sent to all IMS (in MPG it was sent to 3 IMs as three institutes are involved), asking for an assessment on four issues:

- 1) Status of GEP (gender equality plan)
- 2) Process of implementation: challenges and learnings
- 3) Content of GEP
- 4) Support needed for further progress

So the challenges and support needs reflect the perspectives of thirteen IMs. Ideas and suggestions from the evaluation team are marked with *-> Critical friend*.

The target of this interim questionnaire was to reflect on the GENERA implementation process and related issues like support needed, learnings. By making interim-results available, we aim to give quick feed-back to all relevant actors in order to facilitate the process and enable mutual learning. It is also very relevant for us to point out which challenges the GENERA implementation managers face in detail when they aim to implement GEPs in research organisations in the physics field, varying in many aspects like organisational structure, gender awareness and size.

The findings of this report are supposed to support the IMs and to stimulate the ongoing process of designing and implementing GEPs or gender equality measures without a GEP.

#### **17.1.1. General challenges in practice when implementing GENERA**

In the ex-ante report the main challenges that GENERA partner organisations faced or expected were discussed (see GENERA ex-ante assessment report; Deliverable D 3.2A). A few months afterwards, the situation in most partner organisations has not changed very much yet. Still the process how to design a GEP is unclear in some partner organisations, data collection is not finished and lacking support from management is reported. Time pressure most often is mentioned as hindering factor for the design and implementation process.

Here we try to highlight a few challenges that we found in practice.

##### **Difficult to get started: 'tailored' GEPs have limitations**

GENERA partners are supposed to design and implement tailored GEPs. 'Tailored' is related to the content of the GEP and to the process of implementation. This approach should help to meet the specific needs of each partner organisation to take into account the various organisational environments of all partners. By this, resistances should be mitigated and specific measures specifically for the physics field should be developed and implemented.

Yet this openness in content and process seems to cause some delays and insecurity within the organisations, as it seems unclear what to do (next) and what to focus on. Already the step to identify what is needed in an organisation or department was described as difficult, as IMs sometimes do not know which data are needed to describe the status quo and to identify the potential fields of interventions. In the meetings of the IMs a strong focus has been put on data (collection, analysis), this seems to confuse and stress some IMs. The link between data (to be collected) and measures (to develop) was sometimes unclear.

So a next challenge in the GENERA partners is to define the focus of interventions and the focus of the GEP. Which measures should be included? IMs miss an assessment on the efficiency of measures, like: 'When I want to have more female physicists, what should I do best?' It has to be stated here that IMs often lack (parts) of the relevant knowledge needed for IMs (see below).

It was reported that it is unclear who suggests measures, who decides and designs what is needed in an institution. Also it takes someone with the know-how and skills to develop an argumentation to argue/negotiate/ sell measures.

### **How to provide relevant knowledge for implementing GEPs**

To make structural change happen, different actors ought to be involved with *various forms of expertise or knowledge*. When analysing the IMs' challenges it becomes obvious that three different kinds of knowledge are useful when being responsible for implementing a GEP in GENERA.

#### ***Gender knowledge, gender expertise***

This knowledge about the social construction of gender, about gender stereotypes and gendered norms helps to identify the problems within an institution and to select the right measures to be implemented.

As GENERA is a bottom-up project that came out of the physics community, gender knowledge is obviously less available than when the GEPs would be implemented in the social sciences with more gender researchers. Lack of gender knowledge or expertise can occur when IMs are not gender researchers, but come from other backgrounds: They could be physicists, work in the HR department or have other functions within the organisations.

One aspect of gender competence is familiarity with the ongoing policy discourse on gender and science as some IMs were not aware of specific discourses or gender policies in science, like the construction of excellence or integrating gender into the research questions ('gender in research'). If this is the case, this field of intervention cannot be addressed in the GEP. In the evaluation sheets it became obvious that some IMs are not familiar with notions related to gender policy which are widely used in European discussion on gender in science, like to reflect on 'the construction of excellence' or what the notion 'gender in research/teaching' stands for. As GENERA is a bottom-up project coming out of the physics community most people are not trained in the European policy discourse on gender in science. They often lack awareness for these topics that are complex and could not be explained in detail in the online-survey. This illustrates a lack of awareness for the topic as such, and as NO gender training is provided for IMs, it is rather difficult for some IMs to get to know about these complex issues. It is difficult to imagine that IMs can bring it up or 'sell' it to the management. So these topics basically have not change to be addressed in a GEP (except someone else brings them up), or only well-known and obvious measures are used while the implementation of really innovative and highly effective measures do not happen. An example therefore is a lack of knowledge about unconscious bias. IMs would like how to proceed to get to know if there is unconscious bias in their organization. Best practice examples are necessary and as well as suggestions what measures might be effective, how they might look like and which common standards GENERA established to mitigate unconscious bias in physics.

Gender expertise also means to be able to link theoretical concepts to work in the implementation practice, like how to translate theoretical goals into measures or how to transfer data into goals and measures.

IMs also need gender expertise in translating the complexity of gender knowledge into a language that is easy to understand for management and scientists. This might be even more difficult when there is little gender expertise or at least gender awareness at the management level of the organisation. If IMs feel secure in gender issues it was described as being easier to meet with top management and to try to convince them or gain their support. Of course, the relevant “cultural” context is relevant and “field specific/physics specific” knowledge is again different. Gender knowledge is also needed in the organisation, this facilitates the implementation process. But IMs report about a lack of acceptance for gender in the management and in the scientific staff. Sometimes it is difficult that knowledge generated and provided by GENERA, like the tool-box or the roadmap, get accepted. This project-based information is not seen as relevant for people already dealing with these issues for a while and prefer doing it their own way.

Even when IMs are gender researchers, but have no expertise in the implementation of gender (change) projects, this might cause problems, like setting up processes and working structures, organising commitment or practical issues like getting clear how decisions are finally made and what needs to be done until then. Almost no IM has extensive experience in setting up systematic structural change processes; only some have experience with working in various forms of equality commission or collaborated in implementing processes e.g. together with the HR department.

### ***Change knowledge***

As no IM is a gender scholar with additional expertise in the implementation of gender equality measures, a lack of practical guidance or consultant /supervisor who gives advice became obvious. It is highly recommended here to provide some sort of external gender consulting in further projects or even within the runtime of GENERA for each IM or for the overall group of IMs.

### ***Change / process knowledge***

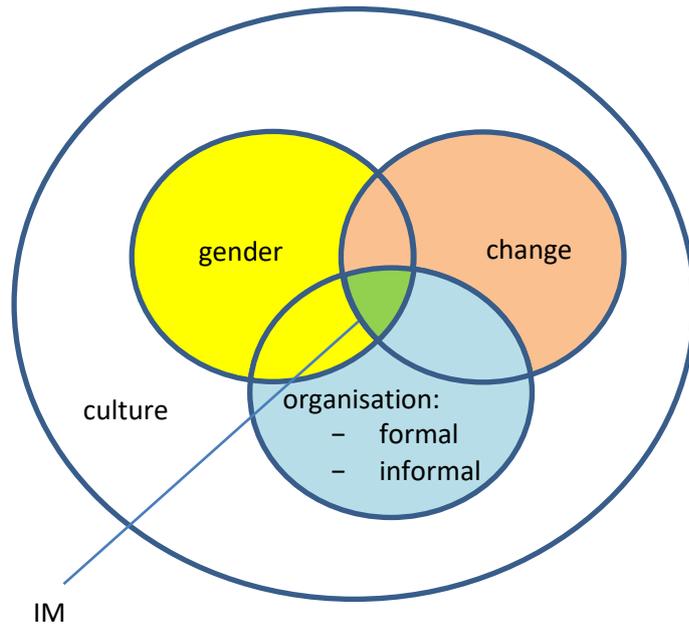
Knowledge about how to implement a change process: only very rarely IMs have organised changed processes within organisations before working in GENERA; only a few are or have been members of gender equality committees or have worked within/with an HR department. Only very few have experience in setting-up change processes in practices (in the limited runtime of a project), so this knowledge is hardly available in the consortium.

### ***Organisational knowledge***

IMs also need information about their own organisation: About the formal structures as well as about informal rules and power relations. This is specifically relevant when IMs have to decide and negotiate which member of the staff is within the implementation team, in the task force or who should be approached when. This was a challenge mainly for these IMs who were hired at the start of the project. Establishing good personal ties to relevant actors was reported to really facilitate internal processes, like the collection of data.

All these competences would be necessary to be well prepared for the job of an IM.

Figure 1: relevant expertise for IMs



In many cases, IMs lack one or more forms of expertise; i.e. they only have expertise in one of these fields or are physicists who have no experience in those fields. Therefore, the knowledge needed has to be provided: GENERA needs to find a way for knowledge provision.

Further, the acceptance of IMs in an organisation heavily depends on their gender expertise, but also on their potential to drive a change process. Another success factor is when IMs themselves are in real power positions and able to decide on what is implemented. It was identified as one main success factor to have professors or top manager in the implementation team (Holzinger et al 2016).

#### Critical Friend's ideas / recommendations:

- ➔ The consortium lacks experience in the implementation process. So far, this is provided by the IM lead-persons with a lot of effort. But as they have never implemented a change process themselves, practical hints and guidance is lacking. So IMs should receive individual coaching, either peer coaching or even better: external support from experienced practitioners should be provided. They could help IMs to develop effective gender equality measures for their organization, support them in convincing the management etc. Also Gender Expert Board could be asked again for feedback on the crucial challenges.
- ➔ Which measures should be chosen and which ones are in particular effective is still a challenge. There is no space provided for knowledge transfer so far, thus those partners who already have measures implemented have not been asked to provide their experience for the "starters" so far. Nor does the toolbox include an assessment on the effectiveness of measures and what works best.
- ➔ Some fields of interventions were not discussed or taken into consideration for further discussions, first of all the 'gender in research' topic: NO partner has ideas on that, some IMs do not understand the topic. For integrating gender into physics research content, innovative physics-specific approaches could be identified and developed in GENERA consortium.
- ➔ The issue should be discussed in the consortium, knowledge should be provided and responsibilities for this task need to be defined. Further such issuers are unconscious bias or excellence.

## How to get implementation started

### ***Gain commitment from management / organisation / consortium***

IMs from some partners still report that the top management does not pay attention to the GENERA project and / or does not provide support. This hinders the design process as nothing can be decided. In some partners there is no commitment to a GEP so far. In most of the 11 partner organisations IMs reported that it is difficult to get attention, time for a meeting – as people are busy and for other different reasons.

Time constraints of management people or senior scientist were reported to also be a main constraint for participating in task forces or implementation teams. Precisely communicating the benefit they personally or the organisation in general have is an important pre-requisite here.

But IMs report that it is crucial to get the support of the management, as IMs as actors are not strong enough to make change happen and get projects implemented. It was also requested a few times to get support through a powerful consortium; the reference to other European research organisations in physics and to common standards related to gender would also help and empower IMs in their own organisation.

On the other hand some IMs worry that due to funding, nothing will be implemented; that expectations are not met and that money needs to be paid back to EC.

#### Critical Friend's ideas / recommendations:

- ➔ To react to lack of time it might be an idea to reserve time resources from the GENERA project for different organisation members.
- ➔ In the next Governing Board meeting coordinator should make clear that all partners have signed the contract which includes an implementation process. It should be discussed what it means for a partner if no support from management is provided and in consequence, no GEP or measures are implemented by the end of the project runtime: Is this ok or not? Which informal consequences would this have (like disappointment, backlash for gender in physics) and which potential formal consequences (from budget cuts by the European Commission, would it be an idea to ask the project officer to *postpone* the project deadline?)
- ➔ At the workshop in Vienna it was discussed to develop some common standards. Are these already available to support IMs' work? If not, fix the timeline of finalisation at next JS meeting.
- ➔ An idea could be to start writing a GEP as a kind of suggestion in case the management is not supportive and to use this paper for starting negotiations.

Another challenge in gaining support for GENERA is the cooperation with established equality structures like gender equality officer (GEO), gender equality committees: Some IMs have conflicts with the GEO, other lack support or face hidden resistance.

Critical Friend's ideas / recommendations:

- ➔ Try to integrate GEO and give her/him some responsibility in the GENERA project, e.g. as member of the implementation team.

### **Timeline**

One reason was reported why it was difficult to start the process of negotiating and designing a GEP: From the beginning on a clear timeline was lacking. That seems to be a weakness that IMs mentioned, although there is a suggestion from the IM team leaders. It was not clear in the answers how binding this timeline was perceived in the consortium; if it was proposed only or also agreed on. This timeline gives time for the design process until the end of 2017, while the implementation should start in January 2018.

A lack of time to work on the GEP design was reported due to workload in other work packages, e.g. working on the interviews, organising the gender-in-physics-day.

Critical Friend's ideas / recommendations

- ➔ Ask in next JS meeting who will be able to start the implementation in January (as foreseen by IM team leader) and who will not be able. Maybe working groups can be arranged who reflect on the barriers to be in time and on some experiences how to overcome them.
- ➔ Discuss in JS meeting: What can be done by the consortium / coordinator / IM-team NOW to guarantee maximum implementation?

### ***(Still) focus on data/analysis***

Some partners still focus on data collection or even start data collection just now. Some IMs still do not know which data should be analysed or are needed to design a GEP. So, while on the one hand some IMs put a strong focus on data, other IMs think that "GENERA should not advice to the partners spending many time on a high sophisticated data collection process. Instead, GENERA should identify what are the crucial data we need and create a common standard" (IM).

The process of harmonizing at least the data to describe the status quo of gender equality was agreed on at the IM meeting in Rome in July. These data can be used to compare institutions now and to measure some impacts after the end of GENERA. Another option to collect data is the use of the ex-ante report or the interviews conducted in WP 2. Yet it was confusing for some IMs that interview results will be only available by end 2017, when the GEP should be finally designed.

Target data – numbers that should / could be reached by the GENERA activities – are not specified yet. This needs to be done in each GEP. A monitoring tool will be presented to monitor the progress made in each institution. Target indicators are part of the GEP: what can be reached needs to be negotiated within organisation, WP5 monitoring gives illustration on how this can be done.

### **Standards**

For empowering IMs and to enable support from top management, IMs asked again for common standards that GEPs should meet, like what data are collected, what measures should be included,

what kind quality measures should be used. Unconscious bias trainings would be one example: How can one push this measure within the organisation? Who should participate? How long should a training last? Who are recommended trainers? On all these questions GENERA should give an answer; this would support the negotiations within the organisation and strengthen the argumentation. A common “GENERA argumentation” with suggestions and recommendations would be very helpful in some GENERA partner organisation.

### 17.1.2. Individual challenges / recommendations

Very briefly, we also want to reflect on the challenges each partner faced between ex-ante interviews and end of May 2017. So the following table mainly addresses IMs who should get some short information on potential next steps. This should be seen as support from a CRITICAL FRIEND, looking from outside on existing challenges and thinking about potential steps that could be helpful. Of course each partner / IM has to decide if and in which way this can be helpful.

**Table 2: Specific challenges per partner**

<b>Partner</b>	<b>Status-quo, challenges</b>	<b>Critical friend suggestions</b>
CNR	No content for GEP clear yet, lack of management support for GEP	Specify the focus and what would be the content of your GEP: which aims, which measures. It seems that pressure on management needs to be increased: specify a) <i>how</i> can this be organised and b) <i>who</i> could put pressure.
CNRS	Not enough data available	Not enough data available
DESY	No discussion about the content of the GEP yet due to lack of commitment from management.	As lack of management support is the main barrier for working on the GEP two strategies could work: Start writing the GEP (based on GENERA material) and use this draft as a baseline for negotiations. Maybe it helps to have specific suggestions on which management can agree / disagree. This might make GENERA more concrete and bring power. On the other hand develop a strategy how to get the management more involved (meeting of Governing board, compare with other partners, ...).
IAC	Existing GEP should be adopted, not clear yet in which form.	Support from other GENERA partners how to optimize GEP is needed and should be organised. Support from consortium should be provided on a couple of concrete and really effective measures that will be supported by the whole consortium. Make sure (coordinator!) that in agenda, there is time for discussing support needs with IMs, consortium or GEB.
INFN	Still not clear what can be implemented in which form, GENERA team unclear (as CUG exists)	It should be fixed that there will be measures implemented in GENERA. Use the need to implement GENERA measures as argumentation for management and CUG or try to bring CUG to implement measures CUG would like to implement with GENERA budget
IFIN-HH	Lack of interest in GENERA due to high number of women.	When comparative data on partner organisations are available (from WP) this will bring arguments where measures are needed (like e.g. women in leading positions). Think about a strategy to increase the number of people who support

		GENERA.
JU	Stakeholder relevance is unclear	Ask IM-Team to illustrate on stakeholder (which ones, which roles, which support) and discuss with other IMs what are benefits and also strategies / argumentations to make stakeholders support GENERA. As management support on the content of GEP is not available yet: Think about writing the GEP (based on GENERA material) and use this draft as a baseline for negotiations. Maybe it helps to have specific suggestions on which management can agree / disagree.
KIT	GEP and measures already implemented	In order to improve the already existing GEP and measures, new topics could be addressed, like construction of excellence or 'gender in research'. Try to collect experiences, literature, new measures / instruments on this. The latter should also be integrated in the toolbox.
MPG	Three institutes will implement but have not really started. Online survey to collect data is ongoing.	Guidance is needed for the three IMs in the institutes on process, content. Make sure that knowledge and experiences from GENERA are well transferred into institutes. As soon as data are available try to quickly use them for selecting measures, to be able to meet the proposed timeline. GENERA team members could support work in institutes, e.g. to get directors involved.
NWO-I	Implementation will be in four institutes plus on central level, but implementation teams are not set up yet.	In order to start the designing process implementation teams (n=5) are needed; a clear roadmap how to do this (which steps, contacts, .. until when) could help. Try to fix teams and start working on GEPs as the process of negotiating measures / designing GEP will take time.
UNIGE	Data were collected with survey and measures are proposed.	Exchange experiences with other IMs how to get top level people involved and how to convince them to make time available.

### 17.1.3. Support needed: Please act!

We have also asked for the support that IMs would like to receive in their practical work. The following table gives an overview. We have identified various actors that are addressed and linked them to the different needs that were specified. These are:

- The 3 persons of the IM lead team: they are asked to give input on specific challenges.
- The coordinating lead partner and the consortium are also expected to provide support.
- Governing Board and Expert Board are addressed, too.
- Roadmap: By 'roadmap' we mean that issues should be addressed and integrated in the roadmap (as a living document to support IMs as a community of practitioners who aim to bring more gender equality in physics research institutions).
- IMs: can also provide peer-to-peer support for each other
- General / external: maybe expertise from outside GENERA can be mobilized.



**Table 4: Process specific learnings**

Learnings concerning ...	
<b>Task force</b>	<ul style="list-style-type: none"> <li>• Creating a different implementation team an already existing GEP can lead to overlaps</li> <li>• people prefer to get a suggestion/draft which can be discussed</li> <li>• include the HR department and the statistical officer.</li> <li>• believe in the possibility to change the organization</li> <li>• one task force member in a leading position within the Institute</li> </ul>
<b>Data Analysis</b>	<ul style="list-style-type: none"> <li>• identify the most crucial data</li> <li>• disaggregated data is important.</li> <li>• the HR department needs to be involved</li> <li>• Admin Databases are crucial.</li> <li>• important to use data for argumentation</li> <li>• Consider already in advance what kind of data makes sense for your institution</li> <li>• a survey can be created to collect more information. If HR data is very limited</li> <li>• it is important to have as much diversity as possible within data</li> <li>• interviews are important, an evaluation too</li> </ul>
<b>Implementation process</b>	<ul style="list-style-type: none"> <li>• the management has to agree a proposed GEP</li> <li>• law might indicate a certain process</li> </ul>
<b>Timeline</b>	<ul style="list-style-type: none"> <li>• Communicate and schedule all important stakeholders and bodies at an early stage</li> <li>• In cases where actions need to be approved by internal bodies, the timeline depends also on limited availability of people during summer time and outside GENERA.</li> </ul>
<b>Stakeholder involvement</b>	<ul style="list-style-type: none"> <li>• Aims and benefits of the project (GENERA) need to be communicated clearly: find common ground,</li> <li>• engage them instead of having them doing their "own thing"</li> <li>• Stakeholders need gender awareness.</li> </ul>
<b>Internal communication</b>	<ul style="list-style-type: none"> <li>• An institute's meeting is a good to inform relevant people, Involving and motivating them is crucial</li> <li>• Be as transparent as possible</li> </ul>

**Table 5: General challenges**

- How to get political support from the top management
- Insecurity if the management / boards / decision makers will be committed to a GEP, Lack of clarity that they are supposed to implement a GEP
- schedule meetings with directors,
- How to cooperate with existing internal GE stakeholders like the gender quality officer? Conflicts with existing gender officers
- Difficult to build an IM team
- Identify effective measures, guidance from GENERA needed for a coordinated effort
- Identify the major barriers and developing measures for women’s careers
- Time pressure
- Raising gender awareness, make people aware of the relevance of the topic
- Define goals and get them approved
- GENERA implementation is a slow, long progress
- Skepticism, resistances against a GEP

**Status quo of implementation process**

The following Table 7 to Table 22 give an overview of the status quo in the implementation process in each partner organisation. The tables are based on a self-assessment of the IMs.

The colours indicate the progress in the design and implementation process:

**Table 6: Colour system**

	1	2	3	4	5	no answer
e.g. Establishing a „Task force“	It is not planned to form a task force	It is planned to form a task force but activities have not been started so far	First steps are taken like planning who should be involved, how often the task force is going to meet etc.	Task force is under formation, i.e. members are asked to participate, first meeting is organized	Task force is established and working	

### Status quo by step

Table 7: Establishing a „Task force“

GENERA Institution	1	2	3	4	5	n.a.
	It is not planned to form a task force	It is planned to form a task force but activities have not been started so far	First steps are taken like planning who should be involved, how often the task force is going to meet etc.	Task force is under formation, i.e. members are asked to participate, first meeting is organized	Task force is established and working	
CNR				x		
CNRS						
DESY		x				
IAC		x				
IFIN-HH			x			
INFN					x	
JU			x			
KIT	x					
MPG – AEI		x				
MPG – MPE	x					
MPG – MPQ			x			
NWO-I		x				
UNIGE			x			

Table 8: Data Analysis

GENERA Institution	1	2	3	4	5	n.a.
	It is not planned to collect data	It is planned to collect data but data collection has not been started so far	Data is currently collected or has already been collected	Data is currently analyzed or has already been analyzed	Data has been analyzed and conclusions have been made	
CNR					x	
CNRS						
DESY		x				
IAC			x			
IFIN-HH				x		
INFN			x			
JU			x			
KIT						x
MPG – AEI			x			
MPG – MPE		x				
MPG – MPQ		x				
I-I		x				
UNIGE				x		

**Table 9: Design process**

<b>GENERA Institution</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>n.a.</b>
	It is not planned to develop a process for designing the GEP / measures	It is planned to design and agree on a process but activities have not been started so far	The process is currently designed and has not been yet discussed with stakeholders	The process is currently in a negotiation process	The process is agreed upon and followed	
CNR			x			
CNRS						
DESY		x				
IAC						x
IFIN-HH		x				
INFN					x	
JU		x				
KIT					x	
MPG – AEI		x				
MPG – MPE		x				
MPG – MPQ		x				
NWO-I		x				
UNIGE		x				

**Table 10: Timeline**

<b>GENERA Institution</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>n.a.</b>
	It is not planned to establish a timeline	It is planned to design a timeline but activities have not been started so far	The GENERA team is currently designing a timeline	Timeline has been designed but not agreed upon yet	Timeline is agreed upon and followed	
CNR			x			
CNRS						
DESY	x					
IAC	x					
IFIN-HH			x			
INFN				x		
JU		x				
KIT					x	
MPG – AEI		x				
MPG – MPE		x				
MPG – MPQ					x	
NWO-I	x					
UNIGE			x			

**Status quo by partner**

**Table 11: CNR**

	1	2	3	4	5	n.a.
Establishing a "Task force"				x		
Data Analysis					x	
Design process			x			
Timeline			x			

**CNRS:** Data not available

**Table 12: DESY**

	1	2	3	4	5	n.a.
Establishing a "Task force"		x				
Data Analysis			x			
Design process		x				
Timeline	x					

**Table 13: IAC**

	1	2	3	4	5	n.a.
Establishing a "Task force"		x				
Data Analysis			x			
Design process						x
Timeline	x					

**Table 14: IFIN-HH**

	1	2	3	4	5	n.a.
Establishing a "Task force"			x			
Data Analysis				x		
Design process		x				
Timeline			x			

**Table 15: INFN**

	1	2	3	4	5	n.a.
Establishing a "Task force"					x	
Data Analysis			x			
Design process					x	
Timeline				x		

**Table 16: JU**

	1	2	3	4	5	n.a.
Establishing a “Task force”			x			
Data Analysis			x			
Design process		x				
Timeline		x				

**Table 17: KIT**

	1	2	3	4	5	n.a.
Establishing a “Task force”	x					
Data Analysis					x	
Design process					X	
Timeline					x	

**Table 18: MPG-AEI**

	1	2	3	4	5	n.a.
Establishing a “Task force”		x				
Data Analysis			x			
Design process		x				
Timeline		x				

**Table 19: MPG-MPE**

	1	2	3	4	5	n.a.
Establishing a “Task force”	x					
Data Analysis		x				
Design process		x				
Timeline		x				

**Table 20: MPG-MPQ**

Interview Question	1	2	3	4	5	n.a.
Establishing a “Task force”	x		x			
Data Analysis		x				
Design process		x				
Timeline		x			x	

**Table 21: NWO-I**

	1	2	3	4	5	n.a.
Establishing a “Task force”		x				
Data Analysis		x				
Design process		x				
Timeline	x					

**Table 22: UNIGE**

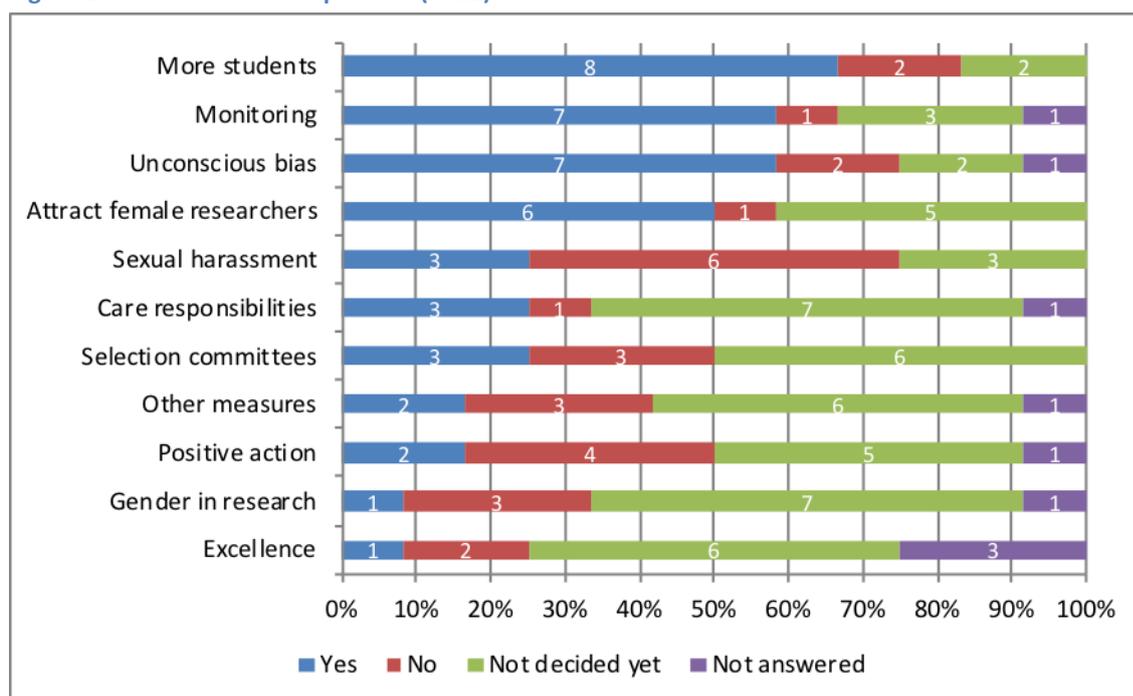
	1	2	3	4	5	n.a.
Establishing a “Task force”			x			
Data Analysis				x		
Design process		x				
Timeline			x			

**Content of GEP**

To get an idea on what will be the focus of GEPs (which is also relevant for developing the long-term monitoring tool in GENERA), IMs were asked in which fields of interventions they plan to implement measures.

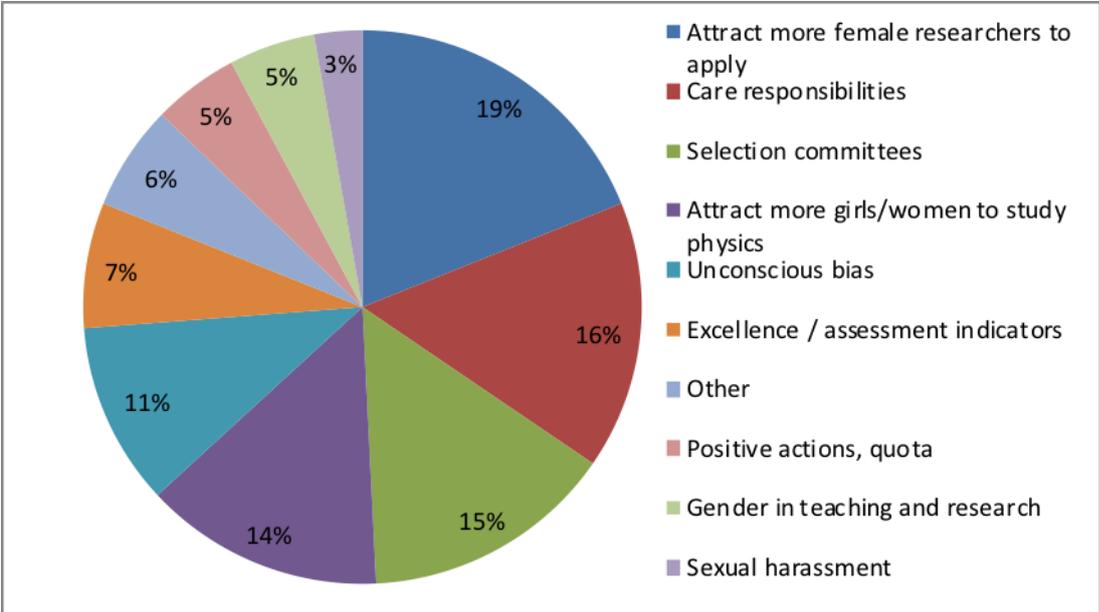
For most GENERA partners (n=8), attracting more students is a potential a field of intervention they have decided to work on. Monitoring and unconscious bias are already fixed to be addressed from seven partners. In contrast, only one partner organisation has decided already to work on gender in research and on excellence.

**Figure 2: Focus of measures planned (n=12)**



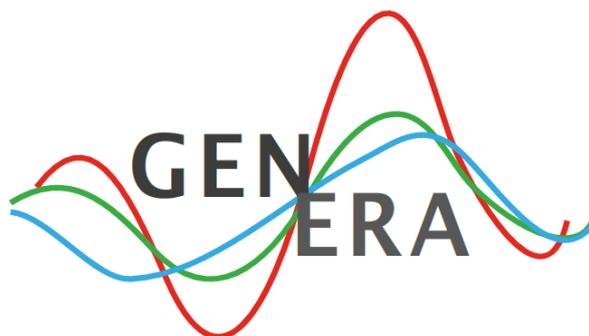
Next, IMs were also asked on their focus of implementation work in terms of their workload, effort and resources they will allocate to the specific fields of interventions. The workload of an average GEP will be distributed between all measures in the following way:

Figure 3: average GEP



## 17.2. Report on Evaluation sheet 2

Grant Agreement No. 665 637



### Gender Equality Network in the European Research Area Performing in Physics

*CONFIDENTIAL – for members of GENERA consortium only!*

## Report: Analysis of evaluation sheet 2

April 2018

<b>Work Package 3</b>	Monitoring and Evaluation: Develop and test a tool to monitor progress of gender equality
<b>Task 3.2</b>	Assessment of gender equality in participating research organizations
<b>Responsible Beneficiary</b>	Joanneum Research (Austria): Helene Schiffbänker, Lisa Schön

As part of the accompanying evaluation within the GENERA project a second interim evaluation was conducted in January 2018 through an online survey. An invitation was sent out to the implementation managers (IMs) of the GENERA partners all of which answered to the survey but in varying amount of details. Altogether 13 surveys were returned from 11 organisations (three institutes are involved in MPG and the survey was answered by the three IMs respectively).

The aim of the second survey was to assess the status quo as well as the success and challenges of the project up to month 28 of the 36 month project runtime. Similar to the first interim evaluation, the following issues were addressed:

- Status of Gender Equality Plan (GEP)
- Process of implementation: support/success factors and challenges
- Degree/form of stakeholder involvement
- Targets and measures that were specified in GENERA
- Implementation process so far and what is still planned for the rest of the project

In the following we first want to address the overall outcome of the second interim evaluation and then describe the status quo and specific challenges of the individual partners. Note that the answers reflect the perspectives of the IMs answering the survey. Open questions for the ex post evaluation are derived from their answers and are summarised in **Table 24**.

#### **17.2.1. Overall experiences in the implementation of GENERA**

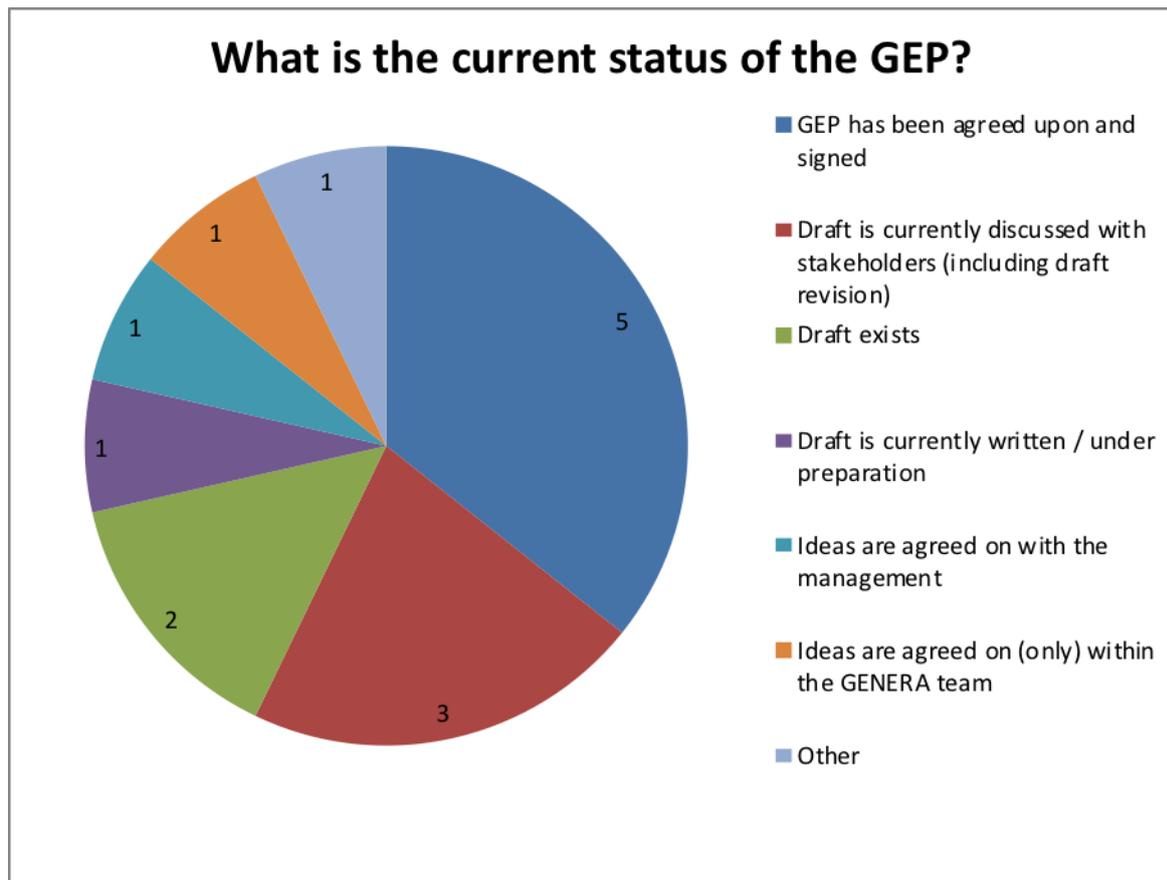
The first interim evaluation conducted in June 2017 (reflecting the situation of the project until the end of May, month 21 of 36 of the project runtime) showed that the process of developing a specific GEP was still not clear in many of the partner organisations. Furthermore, the data collection had not been finished and management support was often still lacking. The second interim evaluation shall now show the progress concerning these challenges until the end of December 2017, i.e. six months later.

##### **Status of the GEP**

By the time of the second interim evaluation 4 out of 13 partners said they are developing an entirely new GEP (31%) and another 3 partners (23%) are developing a specific GEP for one or more physics departments/institutes. The respective survey question gave the alternative option of not developing a specific GEP but gender equality measures, which was chosen by 2 partners (15%). The remaining partners are all either improving or continuing an already existing GEP of the organisation. Overall, 6 out of 13 partners are developing the measures/GEP for the whole organization, 4 are targeting one physics institute and 3 are targeting several.

By January 2018 the image that arose from the second interim evaluation is that a GEP has been agreed upon and signed in only 5 of 11 organisations responding to this question (46%). In 3 organisations a draft was discussed with stakeholders at the time (27%). The distribution among the remaining answers is depicted in **Figure 4**.

**Figure 4: Current status of the GEP**



### **Support/success factors and challenges**

The success factor that was most often mentioned is support from the management or board. Approval from the management is obviously very important in order to implement gender equality measures. The second most commonly mentioned success/support factor is data availability. In this context also the ex-ante evaluation report was mentioned as important source to point out where the biggest problems lie. Furthermore, support from stakeholders in general and especially from the gender equality officer (GEO) are essential for the success of the project.

The biggest challenges are the lacking support from faculty members and the general cultural resistance against gender equality measures within the department/organisation. Hence, also a lack of manpower assisting in the implementation as well as insufficient funding is a problem observed by some partners. The limited interest in the project however does not only apply to men but also to women. Female scientists that were approached to join committees, for instance, were reported to have declined.

Generally it seems that the gender topic already causes a sort of “gender fatigue” in many people and so there is limited understanding and/or interest in implementing further measures. As the ex-ante report has shown, there is often a big gap between the perceived and actual gender equality, particularly in former communist countries. But also in Germany where gender (in-) equality has been an ongoing issue and regulations are in place the implementation and therefore the reality are in many cases unsatisfactory.

Some other challenges that were mentioned include (i) the time factor (referring to the project duration); (ii) data availability; and (iii) organisation of the relevant stakeholders.

### Stakeholder involvement

Similar to the first interim evaluation the second online survey particularly asked about the involvement of top management; the human resource (HR) department; the gender equality officer (GEO); as well as the head of the institute/department. Additionally, the role of employee representatives and researchers/scientists were assessed.

By the time of the second interim evaluation, each of the 13 responding IMs stated that top management is involved in the implementation of the GENERA project. Management typically has to approve and adopt the GEPs, promotes the measures to be implemented or even gives suggestions on the priorities. Mainly the responses portray a rather neutral picture of management involvement, linking management's tasks mainly to approval and signing of the commitment.

The HR department, the GEO and the head of the department are each involved in 10 out of 13 organisations, respectively. The most important task of the HR department is to provide data whereas 4 partners mention that the HR department also supports the designing and implementation of the GEP. According to 3 responding IMs there is no such position as a GEO within the organisation. Otherwise this stakeholder commonly supports the implementation process and gives suggestions on priorities. Similar to the role of top management also the head of the department/institute is mainly involved by signing the commitment and providing support.

Other stakeholders which support the implementation of a GEP include employee representatives and researchers. These are typically involved in discussions, give suggestions or opinions and help with the implementation of the GEPs.

### GENERA targets and measures

A list of categories for targets from which the partners could choose the ones fitting their specific gender equality targets and measures are depicted in **Table 23**. The type of target that was most often chosen is *supporting the retention & career progress of female researchers* (Frequency = 9) followed by *raising awareness for gender equality* (Frequency = 8). For the former, the partners mentioned that they want to specifically increase the proportion of female professors; to facilitate dual career exchanges; promote mentors and role models; and offer support for family building. Some of the measures to reach these goals are to offer unconscious bias trainings and guidelines to all involved in education, supervision and selection of scientists; to use long term monitoring of career progression; and provide child care facilities.

**Table 23: General targets**

General Targets	Frequency
Increase the pool of female physicists (more female graduates)	5
Attract more female researchers to apply	5
Supporting the retention & career progress of female researchers	9
Supporting reconciliation	6
Gender balance in decision making processes	4
Composition and gender fairness of selection committees	3
Gender-fair and transparent selection criteria	2

Gender-fair and transparent selection procedures	2
Inclusion of gender in research	2
Inclusion of gender in teaching	0
Raising awareness for gender equality	8
Combating discrimination and sexual harassment	3
Other	6

Raising awareness as a general target has become clear from the beginning of the project as the ex-ante report has shown the general lack of awareness towards gender equality issues. In this context also the role of unconscious bias is mentioned, particularly in recruitment. However, raising awareness concerns all levels of the organisations. Specific measures that are planned or already in place include workshops and training programmes for gender issues and unconscious bias; to promote physics jobs in high schools; and organize Gender in Physics Days (GiPDs) regularly.

Overall, the most common targets and respective measures revolve around offering trainings, increasing the share of female scientists, promoting work-life balance by offering child care facilities and flexible work-time models and providing mentoring programs for young female scientists. Hence the expectations formulated towards these measures are also primarily connected with increased awareness and sensitivity towards gender equality issues and a (long-term) development towards more women in leading positions. More details on the planned measures and whether they fit the general targets will be discussed individually in section 3.

#### **Implementation so far and what is still planned**

By the time of the second interim evaluation (January 2018) 39% of partners have already started implementing measures while the remaining 61% have not. Note that two institutes did not answer the question but belong to MPG, for which the third institute reported that they did not yet implement measures, suggesting that this applies to all three institutes at MPG. The specific measures implemented by the 5 partners (KIT, CNRS, UNIGE, IAC, and INFN) in 2017 are discussed individually in section 3.

Overall, the experiences are quite different between the respective partners. While some report that management, students and/or female scientists were enthusiastic and happy about the implementation others say that progress is very slow due to a lack of awareness or general interest concerning the gender issue. However, 9 out of 13 partners said that awareness for gender equality could be improved since the beginning of the project. Furthermore, better data availability and a clear commitment from top management towards gender equality measures were achieved by 7 out of 13 partners respectively.

Also cultural change has already become visible according to some of the partners (7 out of 11 report changes). This includes more communication/discussion about gender equality and increased alertness for gender issues. However, according to one partner there is still a lot of frustration. The added value specifically contributed by the GENERA project described by the partners includes the improvement of cooperation; more manpower devoted to implementation; the collaboration with experts on gender issues; starting a discussion and increasing awareness; availability of data and their sustainability along time; and creating a network with other physics institutes.

Until the end of the GENERA project duration 8 partners still plan to implement some or even all of the proposed measures. The respective goals – if they were listed by the partners in the online survey – are discussed individually in the following section.

### 17.2.2. Individual challenges faced by the GENERA partners

This section shall provide a short overview of the status quo and challenges of each of the GENERA partners by the time of the second interim evaluation. First, a quick overview of the status quo including the most relevant challenges and open questions for the ex-post evaluation are summarised in **Table 24**. Then the results are discussed in a bit more detailed for each of the respective partners.

**Table 24: Status quo and specific challenges per partner**

Partner	Status-quo	Challenges	Questions for ex post evaluation
CNR	They are not developing a GEP but implement gender equality measures; top management involved but not explained how; cooperation and data availability improved.	Involving management; cooperation between different offices; diffusion.	<ul style="list-style-type: none"> <li>• In what form or to what degree was management involved in the process?</li> <li>• What measures were taken to improve cooperation?</li> <li>• What measures were taken to raise awareness?</li> <li>• Is it still the aim to implement a GEP?</li> </ul>
CNRS	Gender equality measures are implemented in several physics institutes; in 2017 measures to raise awareness were already implemented; further measures planned before GENERA is over; interest for the project high in general but not from physicists.	Finding the right interlocutors within management and GEO; lack of manpower beyond the 2 people in the GENERA team.	<ul style="list-style-type: none"> <li>• Could the implementation team raise interest of physicists for gender equality issues?</li> <li>• Were they able to increase the share of female speakers at conferences?</li> </ul>
DESY	A GEP is designed for the whole organization; draft is under preparation; no specific targets and measures defined or implemented so far; increasing awareness already	To convince management to go for a GEP; convince workers council to support the creation of a GEP; general resistance against changes.	<ul style="list-style-type: none"> <li>• Could the GEP design process be finished until the end of the GENERA project?</li> <li>• Could employees be convinced of the necessity for gender equality</li> </ul>

	visible.		measures?
IAC	Working on the implementation of existing GEP and planning the next one; hired a full time gender equality expert; still a list of measures to be implemented in 2018.	The lack of time of the volunteers involved; resistance to gender equality policies; lack of clear and concrete objectives regarding gender equality in the GEP.	<ul style="list-style-type: none"> <li>• Was the gender equality expert hired only for the duration of the GENERA project?</li> <li>• Which targets and measures were already planned or implemented and which came specifically from GENERA?</li> </ul>
IFIN-HH	Developing a new GEP for one physics institute for which a draft exists; no GENERA measures implemented in 2017; a number of targets and measures set which shall be implemented in 2018; difficulties in raising awareness.	“To be taken seriously when colleagues and management can point to 43% women in IFINHH”; size and location of the institute make it difficult to implement bigger measures by themselves (such as child care facilities etc.); reluctance of some women to join in solving some of the problems.	<ul style="list-style-type: none"> <li>• What are the reasons that there are generally many women but not in leadership positions? Where does the selection take place?</li> <li>• In which form does discrimination take place?</li> <li>• How do women perceive the situation?</li> <li>• In which form is the progress monitored?</li> </ul>
INFN	GEP developed for the whole organization, following an existing one; CUG and management responsible for implementing GENERA measures; only slow progress due to lack of awareness.	Awareness of the gender issue; to increase female presence in all committees as well as higher ranks; to show that this also affects men (can improve their working environment).	<ul style="list-style-type: none"> <li>• Which targets and measures were specifically designed within GENERA and which are still part of the previous GEP?</li> <li>• Which GEP has been agreed upon and signed and which is currently discussed? (not clear from second interim evaluation)</li> <li>• How is the work divided between CUG and GENERA?</li> </ul>
JU	Developing a GEP for one physics institute; draft exists and is agreed upon within the GENERA team; there is no GEO but various	Cultural resistance; lack of resources (financial and human); the fact that the team members are “outsiders as the Institute of Sociology” and try to	<ul style="list-style-type: none"> <li>• How could the members of the physics institute be approached?</li> <li>• Is there acceptance from the physics institute for</li> </ul>

	stakeholders are involved in the implementation team; no measures realized in 2017 but still some planned until the end of the project.	implement measures at the physics institute.	<p>“outsiders” to propose or implement measures?</p> <ul style="list-style-type: none"> <li>• Could the planned measures for 2018 be achieved?</li> </ul>
KIT	GEP and measures already implemented; working on improvement within GENERA.	Obtaining funding for the measures; getting the acceptance in the faculties; finding a commitment which measures	<ul style="list-style-type: none"> <li>• Could the interest in the project and gender equality in general be kept up?</li> <li>• What is the outcome of the monitoring efforts?</li> </ul>
MPG-AEI	Draft for GEP exists and is being discussed by the stakeholders; not much information provided.	Organization of the relevant stakeholders; data availability; resistance.	<ul style="list-style-type: none"> <li>• Could the GEP be agreed upon and signed? Were measures implemented within the GENERA runtime?</li> <li>• Could resistance be overcome?</li> <li>• What are the differences to the other two participating institutes?</li> </ul>
MPG-MPE	Draft for GEP exists and is being discussed by the stakeholders; not much information provided.	Organisation of the relevant stakeholders; Limited time; Gender bias.	<ul style="list-style-type: none"> <li>• Could the GEP be agreed upon and signed? Were measures implemented within the GENERA runtime?</li> <li>• Could the challenges be overcome?</li> <li>• What are the differences to the other two participating institutes?</li> </ul>
MPG-MPQ	Draft for GEP exists and is being discussed by the stakeholders; provided some information also on measures that shall still be implemented until the end of the project.	Resistance; large workload; non-simultaneous implementation (GENERA lacking behind the institute’s schedule).	<ul style="list-style-type: none"> <li>• Could resistance be overcome?</li> <li>• Could the measures be implemented as planned?</li> <li>• What are the differences to the other two participating institutes?</li> </ul>

NWO-I	GEPs for the four participating physics institutes are agreed upon and signed; no measures implemented in 2017 but the planned start is early 2018.	Convincing others to implement more than is already there; lack of resources to implement further measures; finding a good way to communicate with staff and <i>“let people feel responsible for taking action”</i> .	<ul style="list-style-type: none"> <li>• Were they able to start the implementation process as planned (in early 2018)?</li> <li>• Did people start feeling responsible?</li> <li>• How do the participating institutes work together in the implementation?</li> </ul>
UNIGE	Working on an additional GEP for an existing one; detailed targets and measures defined; measures implemented already and further implementation planned until the end of GENERA.	Engaging leadership/management and motivating them to participate in GENERA meetings; getting the approval for practical actions (long processes); changing the organisational culture.	<ul style="list-style-type: none"> <li>• Which measures were particularly designed within (or with influence from) GENERA and which were still part of the previous GEP?</li> <li>• How is the work of the commission against harassment perceived by the staff members? Is it used/accepted?</li> </ul>

## CNR

The National Research Council (CNR) in Italy has been struggling mainly with raising awareness and getting support from top management since the beginning of the GENERA project. By the time of the second interim evaluation, however, they were able to improve both awareness and involvement of management, even though this was still described as some of the biggest challenges. Other somewhat related challenges they mentioned are to promote cooperation between different offices and general diffusion.

Overall, CNR has not (yet) developed a specific Gender Equality Plan (GEP) but is implementing gender equality measures. The focus does not specifically lie on Physics institutes but on the organization as a whole. Top management, the Gender Equality Officer (GEO) and the head of the department/institute are involved in the process but the sort of involvement is not closer defined by the respondent in the second evaluation. Also the targets and implemented measures were not closer defined, only the categories from the drop-down menu in the online survey were chosen. These chosen general targets were: Increase the pool of female physicists (more female graduates); Attract more female researchers to apply; Supporting reconciliation; Gender balance in decision making processes; Inclusion of gender in research; Raising awareness for gender equality; Gender-fair and transparent selection criteria; Gender-fair and transparent selection procedures; and Combating discrimination and sexual harassment.

When asked about the expected changes of the planned measures, CNR expects *“long term changes in involving more women in head positions”*. In order to reach this goal some measures are still planned and are yet to be realized. This includes a three years measures program and the involvement of different stakeholders in the process (statistics department, researchers committee

with focus on gender issues). The IM team is responsible for the implementation of the GENERA measures in 2017 and 2018.

Altogether the clear support by the EU and European Commission were emphasised as big support factor to make it easier to promote the issue within the organisation and to approach top management. Also data availability is an important factor.

## **CNRS**

The National Centre for Scientific Research (CNRS) is implementing gender equality measures in several physics institutes. Top management, the Gender Equality Officer (GEO), the head of the department/institute, the employee representative and the researchers are involved in the process. The top managers and the head of departments or institutes support the design and implementation of the GE measures by giving suggestion on priorities. The GEO offers information on GEP status, provided data and gives suggestions on priorities for the implementation. Employee representative and researchers carry out implementation actions.

The most important success factors so far are the encouragement and approval from the management and the GEO, the Interest from other RPOs as well as the good cooperation within the GENERA team. Furthermore, the GENERA project added value by increasing the manpower devoted to gender equality. On the other side the three biggest challenges so far were:

1. Identifying priorities specific to physics;
2. Finding the right interlocutors within management and Gender Equality Office;
3. The lack of manpower beyond the two people in the GENERA team.

The following measures were defined by CNRS and linked to the general targets proposed in the online survey:

- Increase the pool of female physicists (more female graduates): by (i) promoting physics jobs in high schools, among students and teachers; and (ii) increase awareness of female physicist role models in high schools and with the general public;
- Attract more female researchers to apply: by appointing women to team and department lead;
- Raising awareness for gender equality: through presentations and seminars;
- Supporting reconciliation: by providing information on installation procedures for newcomers;
- Combating discrimination and sexual harassment: by providing information on existing measures against harassment.

In 2017 measures to raise awareness through presentations and documents were already implemented. Also events to promote physics jobs in high schools were carried out and women were encouraged to apply. The experiences so far have been that the implementation of measures is widely appreciated – also by the management – and that there is enthusiasm to participate in the organized events. From physicists, however, there is only limited interest. Until the end of the GENERA project the implementation team still plans to improve data availability concerning female experts in physics, increase the share of female speakers at conferences, provide information on work-life balance for newcomers and implement specific actions for post-docs. The planned measures shall increase awareness among all levels of stakeholders and in the long term “*attract*

*more women to physics*". To a certain degree GENERA has already increased awareness for gender equality and improved data availability.

## **DESY**

The German Electron Synchrotron ("Deutsches Elektronen Synchrotron", DESY) is developing a GEP for the whole organization. Gender equality has been a priority at DESY since 2000 whereas by the time of the second interim evaluation a draft of the GEP was under preparation.

The most important support factors for the IM team at DESY are the results formulated in the ex-ante report which point out the priorities for action, the results of the Gender in Physics Day and the ongoing discussion with all local stakeholders (GE officer, management, HR dept., colleagues). The specific added value from GENERA is that awareness for gender equality could be raised and a whole number of players has been involved in the project. The biggest challenges in connection with implementing a GEP at DESY are:

1. Convincing the management to agree on a GEP;
2. Convincing the workers council to support the development of a GEP;
3. Deal with the general resistance against changes.

Relevant stakeholders involved in the process are general management, which is a member of the GENERA Governing Board; the GEO, who supports the official process and is part of the GEP task force; and the HR department, which provided data and is also part of the GEP task force. Department heads or employee representatives are not involved in the process.

In the course of the online survey (second interim evaluation) specific targets and measures have not been defined by DESY. There also have been no measures implemented in 2017 and it is not clear what can still be done until the end of the GENERA project. The expectation towards the GEP, however, is that it will change the attitude towards gender equality at DESY. More awareness has already become visible and the respect for gender equality work has also increased in the course of GENERA.

## **IAC**

The "Instituto de Astrofísica de Canarias" (IAC) was at the time working on the implementation of the existing GEP (2016/2018) and planning the design of the next one. The focus of the GEP lies on the whole organization.

The most important support factors so far have been the availability of sex-disaggregated data and qualitative interviews that helped in identifying the *"concrete obstacles affecting women's careers"*. Furthermore, a big success was the adoption of the GENERA proposal on *Gender Equality Fields of Action* by the Board. In this context it was also agreed that a protocol would be applied in scientific conferences and events organized by the IAC. The added value of GENERA is also that the organization can be part of an international trend in implementing gender equality measures across European research centres.

The biggest challenges in the implementation process up to January 2018 were:

1. The lack of time of involved volunteers and the insufficient collaboration and coordination among different departments;
2. Resistances to gender equality policies;

3. The lack of clear-cut objectives for gender equality in the GEP and resources available.

For the developments within the GENERA project the IAC hired a full-time gender equality expert. The equality commission within the institute makes sure that all areas/employees are represented. Another important stakeholder is the head of the HR department who is the principal investigator (PI) of GENERA. Generally, the GENERA implementation is organized as follows: the HR department is in charge of the development and implementation of the GEP whereas top management approves and promotes the measures. The heads of the departments are then responsible for applying the measures that affect their departments. Researchers and scientists also carry responsibility, namely to apply the measures that *“affect their performance and responsibility”*.

In the second interim evaluation 3 targets and related measures were defined by the IAC:

- Raising awareness for gender equality: to guarantee the principle of gender equality in every field and process of the IAC through (i) equal access to training opportunities; (ii) establishing dissemination channels on training opportunities for people who enjoy parental leaves; (iii) organizing training courses on gender equality; and (iv) coordinating between the GE Commission and the Security & Health Committee on maternity-related labour risks and sexual harassment;
- Supporting reconciliation: to facilitate work-life balance and co-responsibility in domestic and care work through (i) developing a guide on work-life balance measures; (ii) collecting sex-disaggregated data regarding work-life balance; (iii) proposing new work-life balance clauses in the collective agreement; and (iv) providing rooms for breastfeeding;
- Inclusion of gender in research: to promote and strengthen women's participation at all levels and in every aspect of Research & Innovation through (i) reviewing the calls for selection processes from a gender perspective; (ii) removing sexist language from the calls for selection processes; and (iii) reviewing the criteria on timeline requirements for degrees from a gender perspective.

The GENERA project and the implementation of these measures are expected to increase the awareness among staff and management and hopefully lead to sustainable gender equality policies even after GENERA. In 2017 the measures have been approved whereas the experiences so far are that organising the implementation process needs not only volunteers but also a technical approach. Furthermore, the implementation team needs to clearly distinguish its tasks and measures need to be prioritized and monitored. The following measures are still to be implemented until the end of the project runtime (taken from the answer to the online survey):

- Establish dissemination channels on training opportunities for people who enjoy parental leaves;
- Develop a guide on work-life balance measures;
- Propose new work-life balance clauses in the collective agreement;
- Promote women scientists as project leaders;
- Promote women for scientific awards, academies and associations;
- Promote women for national and international scientific organizations;
- Promote a gender balanced composition of the IAC commissions;
- Promote a gender balance in scientific conferences and events organized by the IAC.

The IM team is responsible for their implementation. So far GENERA has been able to change the awareness and commitment from upper levels but also some cultural change has become visible. Female researchers at the IAC have *“established an autonomous and stable group for women at the IAC to deal with gender issues, empower young women scientists and collect demands”*. Furthermore, the Board has become aware that this is not an issue that can be ignored.

### **IFIN-HH**

The Horia Hulubai National Institute for R&D in Physics and Nuclear Engineering (IFIN-HH) in Romania is developing a new GEP for one physics institute for which a draft existed by the time of the second interim evaluation.

Big support factors in the process are the *“open and constructive discussions with many “players” in the field”*. It is also reported that there are no laws in Romania hindering the process and that gender quasi-equality already exists in the institute. The added value from GENERA is particularly the improved data availability and increased awareness for the issue. Also the need of role models could be shown within GENERA. The three biggest challenges faced in the process by IFIN-HH are:

1. That the issue is taken seriously by colleagues and management because at IFIN-HH already has a share of women of 43%;
2. Solving problems such as providing child-care facilities etc. by themselves because of the small size and location of the institute;
3. Motivating women to participate more in committees or conferences.

The relevant stakeholders involved in the project are management (the local project director was a member of top management) and the HR department (provided data). There is no GEO at IFIN-HH. Employee representatives and researchers added to the project by holding discussion and giving their opinions.

The following specific targets and measures have been defined for the general targets:

- Attract more female researchers to apply: to attract more graduate students to come to IFIN-HH in order to increase the share of females;
- Supporting the retention & career progress of female researchers: to create role models and to offer support for family building by (i) drawing attention to senior female scientists that it is their duty to become role models; and (ii) searching for support from other institutes for a common kindergarten;
- Gender balance in decision making processes: to increase the number of women in selection committees by reporting the numbers to management and the Scientific Council;
- Composition and gender fairness of selection committees: to increase participation of women in committees by reporting the numbers to management and the Scientific Council.

Responsible for the implementation is the IM team. In 2017 no GENERA measures have been implemented. However, it is the aim to work on all of them before the end of the GENERA project. Changes from the planned measures are expected in time but it is emphasized that with these issues *“there are no fast solutions”*. The IM team perceives the situation at IFIN-HH as already very good concerning gender equality and that it is a problem which exists mainly in higher positions. So far data availability and the visibility of the issue could be improved. It is also noted, however, that continuous efforts and monitoring are necessary in order to improve the situation.

## INFN

The National Institute for Nuclear Physics (INFN) in Italy is developing a GEP for the whole organization which follows an existing one ended at the end of 2017. By the time of the second interim evaluation the discussion for a new GEP has been started.

The most important support factors for the implementation of gender equality measures at INFN have been the support from management and personnel but also the Gender in Physics Days and interviews conducted within the GENERA project. Through GENERA also the collaboration with schools and other physics institutes could be improved. The biggest challenges faced in the implementation process were:

1. Raising awareness for the gender equality issue as a problem that needs to be solved;
2. Increasing the share of women in committees and at the top levels;
3. Showing that this issue does not only affect women but also men (*"in order to improve the work environment"*).

The relevant stakeholders are the CUG (Committee for equality, equal opportunity and wellbeing) (designed and monitors the GEP), top management (approved and adopted the GEP) and the department head (supports the GEP implementation). The HR department is also involved but it is not defined in which way. The same applies for researchers. The employee representative keeps track of the GEP implementation and provides support to the CUG (CUG is composed by people that do other work in the Institute and that dedicate part of their time to these issues)..

The following general targets were selected by INFN in the online survey with the connected measures described accordingly:

- Composition and gender fairness of selection committees: One third of the components of selection committees must be women and vice versa; (this rule is obliged by law only for selection committees for permanent positions. The rule was extended to any kind of selection committee);
- Gender balance in decision making processes: Still has to be defined; defined even if something is slowly changing (more women) an annual check is done in order to monitor gender balance;
- Supporting the retention & career progress of female researchers: Mentoring programme for young female researchers started;
- Gender-fair and transparent selection criteria: Minerva Code;
- Gender-fair and transparent selection procedures: Minerva Code; all selection committees have received guidelines related to unconscious bias;
- Raising awareness for gender equality: Introduction of gender issues in training programmes.
- The new disciplinary of competition will contain an explicit document on unconscious bias and application of Minerva Code. Clear selection criteria are included in it.
- The new disciplinary for fellowship positions will contain rules to take into account parental leave periods without penalizing them (parents can recover the parental leave periods- six months maximum- after the end of the fellowships)

The CUG and management are responsible for the implementation of the GENERA measures. In 2017 a mentoring program was proposed which is still part of the previous GEP; in 2018 the program started. So far the experience has been that progress comes only very slowly due to a lack of awareness for the problem. The image seems to be that this is a problem only for women although awareness could already be improved through the GENERA project. It is expected that the project will further increase awareness as well as the number of female researchers.

## JU

The Jagiellonian University (JU) is developing a specific GEP for one physics institute. By the time of the second interim evaluation the draft for the GEP exists and ideas are agreed on (only) within the GENERA team.

Throughout the process, the biggest support factors were the results from analyzing quantitative data on career paths of physicists as well as from interviews and the support from the Rector. The GENERA project added value by initiating a discussion on gender equality and helping to raise awareness – *“at least among some of the physicists”*. The biggest challenges the team has faced so far have been:

1. Cultural resistance;
2. Lack of human and financial resources;
3. The GENERA team members are from the Institute of Sociology and are outsiders to the Physics Institute (also geographically).

The Vice-Rector for Research and Structural Funds, the head of the Office of Human Resources, the Dean of the Faculty of Physics, Astronomy and Applied Computer Science and the Director of the Institute of Physics all agreed to participate in the implementation team. A representative of doctoral students also agreed to participate while so far one of the employees agreed to participate in the implementation team. There is no GEO at JU. Another relevant stakeholder mentioned in the second interim evaluation is the Rector's Proxy for Student Safety and Security who supports the implementation of gender equality measures and also agreed to participate in the implementation team.

The following specific targets and measured were allocated to the general targets in the online survey:

- Raising awareness for gender equality: to rise gender awareness among students, employees and management through (i) organizing gender awareness trainings; (ii) organizing GIPDs regularly; and (iii) collecting sex-disaggregated data;
- Attract more female researchers to apply: to increase visibility of women inside and outside the Faculty by (i) assuring gender equal composition of speakers at conferences; and (ii) including women's merits in discipline in promotional materials of the faculty;
- Increase the pool of female physicists (more female graduates): to enhance recruitment of female students by organizing Girl's Days;
- Supporting reconciliation: Support male and female parents by establishing facilities for babies/children at the faculty.

In 2017 no measures have been implemented. However, until the end of the GENERA project the implementation team still plans to do the following:

- Organize gender awareness training;
- Collect sex-disaggregated data;
- Assure gender equal composition of speakers at conferences;
- Include women's merits in discipline in promotional materials of the Faculty.

Changes that are expected from the planned measures are cultural and organizational changes, increasing the share of women and promoting work-life balance. What has become visible so far is the commitment of top management for gender equality. However, the amount of “*time, money and human engagement*” necessary for developing the GEP is much higher than expected.

## **KIT**

The Karlsruhe Institute of Technology (KIT) – The Research University in the Helmholtz Association in Germany is one of the biggest research and education institutions worldwide. At KIT, the Gender Equality Plan was designed and implemented in 2014 and therefore the aim for the GENERA implementation is the improvement of an already existing GEP which is implemented for the whole organisation. The status by the time of the second interim evaluation is that the GEP has been agreed upon and signed.

On the way to designing the GEP the biggest success factors for KIT were being able to prove the effectiveness of the measures, gaining the acceptance of the leadership level (professors and the management) and implementing measures on the organisational level. The biggest added value from GENERA is the improved cooperation between the physics institutes and the HR department as well as the GEOs. The three biggest challenges on the other hand were:

1. Obtaining funding for the measures;
2. Getting the acceptance in the faculties;
3. Find commitment which measures will be implemented

In the process the management gives the orders and communicates with the divisions and the heads of the divisions then write statements on the developments. The HR department writes and implements the GEP, the GEOs give feedback and employee representatives decide on the GEP as part of the senate. Researchers/scientists are not directly involved in the implementation process.

KIT formulated a number of specific targets and related measures out of different categories for their GEP. The defined measures generally fit the specific and general targets. Three specific targets are connected to raising awareness for gender equality:

- Raising awareness among the leadership;
- Preventing unconscious bias, especially in recruitment appointment procedures;
- Extending gender mainstreaming.

Unconscious bias workshops are the defined measure to reach these targets. Further formulated targets and related measures are:

- Creating family friendly work environments and conditions with implementing flexible work-time models (e.g. home office, childcare, elder care);
- Increasing the proportion of female professors with targeted addresses for appointment procedures;
- Increasing the share of women by promoting role models providing attractive working conditions.

The planned measures are expected to increase sensitivity of leadership and management towards gender equality and unconscious bias. Also employees are expected to be more aware of these issues and the proportion of women (especially in high level positions) will be increased and therefore the gender gap will be decreased. More female graduates are expected as well.

The measures already implemented in 2017 are:

- Started a regular's table for female physicists;
- Held an exhibition of famous female scientists in cooperation with the German Physics Society;
- Unconscious bias workshop.

The experience made throughout the implementation so far is that there is interest and need for action. Throughout the workshops and exhibitions the visibility of women and general awareness of the gender issue could be improved. However, awareness is still generally lacking and the number of participants in the organised events has decreased over time. Role models for women are urgently needed. Until the end of the GENERA project the focus of KIT will lie on monitoring the existing GEP and preparation for the next GEP. Therefore the GENERA results, especially Roadmap and monitoring tree will be applied. Responsible for this are different persons within the IM team.

## **MPG**

Three physics institutes implemented gender equality measures at MPG: The Max Planck Institute for Gravitational Physics (Albert Einstein Institute, MPG-AEI), Max Planck Institute for Extra-terrestrial Physics (MPG-MPE) and Max Planck Institute of Quantum Optics (MPG-MPQ). The draft for the GEPs was being discussed by the stakeholders by the time of the second interim evaluation. In the following, the three institutes shall be briefly discussed together with separate references if answers differ significantly.

The only support factor mentioned by one of the institutes (MPG-MPQ) is the support from the central Gender Equality Officer/Office. Challenges on the other hand are mentioned by all three institutes and partly overlap:

- MPG-AEI: Organisation of the relevant stakeholders; data availability; resistance;
- MPG-MPE: Organisation of the relevant stakeholders; limited time; gender bias;
- MPG-MPQ: Resistance; large workload; non-simultaneous implementation (GENERA lacking behind the institute's schedule).

Information provided on stakeholder involvement by each of the IMs at the participating institutes was very limited. Altogether it can be summarised that top management as well as the heads of the departments are involved/signed the commitment. Further stakeholder which are involved are researchers/scientists who are carrying out discussions on the topic, the GEO who helped shape the plan at least for MPG-MPQ and the HR department by providing statistics (does not apply for MPG-AEI).

Targets or measures are not defined by either of the institutes within the second online survey. It also appears that no measures have been implemented in 2017. According to MPG-MPQ two general measures shall still be implemented until the end of the GENERA project:

- Analysis of the gender related status;

- Measures in the field of reconciliation of job and family care.

MPG-MPQ expects from the planned measures *“a constant binding attention for gender equality aspects”*. The other two institutes do not name any measures or formulate expectations. So far the project has supported data availability and commitment of top management for gender equality issues according to the 3 participating institutes.

#### **NWO-I**

The Foundation NWO-I in the Netherlands consists of the NWO institutes AMOLF, ARCNL, ASTRON, CWI, DIFFER, Nikhef, NIOZ, NSCR and SRON and the NWO-I office in Utrecht where the supporting services provided to the institutes are coordinated.<sup>25</sup> A specific GEP is developed for several physics institutes and has been agreed upon and signed by the time of the second interim evaluation.

The biggest support factors in the process up to January 2018 were the ex-ante interviews as well as the report based on the results, the framework and support within WP4 and the results of the Dutch Gender in physics day (GiPD). The specific added value from GENERA activities is the IM as *“she is able to take up the extra work and brings in the GENERA knowledge (including toolbox and WP4)”* as well as the GiPD. The three biggest challenges on the other hand were:

1. Convincing others to implement more than is already there;
2. Lack of resources to implement further measures;
3. Finding a good way to communicate with staff and *“let people feel responsible for taking action”*.

The process was supported by general management and the HR department whereas the central HR department also put the GEP development on the agenda on the meetings with the local HR departments. The heads of the departments also showed formal commitment in the directors' meeting. There is no GEO or employee representative involved. Researchers/scientists were interviewed and gave suggestions.

NWO-I listed only two targets and the respective measures in the second interim evaluation:

- Increasing the pool of female physicists: specific target is to recruit more females which shall be achieved through gender sensitive recruitment guidelines and senior female role models;
- Supporting retention and career progress of female researchers: specific target is to promote equal opportunities for career progression of men and women through unconscious bias trainings, supervision and mentoring programs.

In 2017 no measures have been implemented yet and it was planned to start the implementation in early 2018. The IM team, the task force and directors are responsible for the implementation. Through the planned measures it is expected that gender balance will be improved and structural change will be promoted concerning the attitude and behaviour of staff members because of increased awareness for gender issues. By the time of the second interim evaluation more awareness concerning gender equality already became visible. Also the commitment from top management as well as the development and implementation of new gender equality measures have changed due to GENERA. Clear cultural change, however, has not become visible yet.

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<sup>25</sup> <https://www.nwo.nl/en/about-nwo/organisation/nwo-domains/nwoi>

## UNIGE

For the University of Geneva (UNIGE) gender equality has been an issue since 2013 and it is currently working on an additional or sub-GEP to the existing one which is implemented for the whole organisation. By the time of the second interim evaluation the GEP has been agreed upon and signed.

The most important support factors for UNIGE have been the *“implementation of a survey to gather more data on education, career development and work situation”*, a visit by Thomas Brage who presented training materials to the employees and the good contact with relevant external actors. The added value from GENERA is the high visibility of the project and the collaboration with gender experts. The three biggest challenges so far have been:

1. Engaging leadership/management and motivating them to participate in GENERA meetings;
2. Getting the approval for practical actions (long processes);
3. Changing the organisational culture.

The management at UNIGE is providing only poor direct support for the implementation process. Generally it seems from the second interim evaluation that support is generally lacking, also from the HR department, which was hardly involved, and the head of the departments/institutes who were not involved. However, there is a GEO who is quite involved in the project and researchers/scientists foster the discussion about the gender topic in the Commission D'égalité.

UNIGE listed 10 specific targets and related measures in the second interim evaluation out of which 5 were categorized as “Other”:

- Harmonization of policies;
- Support employees with old parents in need;
- Trainings from external experts;
- External reviews/evaluations of faculty including gender aspects;
- Financing Gender.

Furthermore, 4 specific targets aim at supporting the retention & career progress of female researchers:

- Collection of missing data at HR level;
- Facilitate dual career exchanges;
- Compensate for lack of child care institutes and expensive geriatric ones; Support couples/parents with young kids;
- Mentors for Assistant professors and PhD students.

Finally, the pool of female physicists shall be increased by increasing the percentage of women in hiring commissions from 25 to 30% and for full professors to 40%, improving transparency of procedures and dedicating funds particularly to female posts.

In 2017 the following measures have been realized at UNIGE:

- Conducted a survey to obtain additional data (see biggest support);
- Visit by Thomas Brage;

- Carried out a Gender in Physics Day as well as *“other outreach events with role models in schools”*.

Further measures that shall still be implemented within the runtime of GENERA are a *“masterclass of Ice Cube with three women PhDs and prof. with students of many city colleges”*, analysing the collected data and receiving further visits from Thomas Brage. Responsible for these measures is the GENERA team together with the Equity Bureau and Faculty Commission for Egalité.

Overall the GENERA team has so far made the experience that male professors but also females in leading positions are lacking interest in the project. This led to frustration also caused by the length of the implementation process. However, through GENERA some things could already be improved, such as data availability, increased awareness and higher prestige for gender equality and related work, commitment from top management and the development of new gender equality measures. There is also a new commission against harassment in response to some accusations. It is still expected that regular monitoring will be improved by the planned measures in order to keep track of the situation.