EVALMIT
National report

Comments from SINTEF/
Institute sector

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Teknologi for et bedre samfunn

General comments

Such evaluations are impontant for identifying internal improvement actions.

The evaluation has positively, to a larger degree that previous evaluations, reflected on the differences between university sector and institute sector. However the committees and panels are still very heavy on university representatives (professors), which may lead to some bias in views and recommendations.

Success factors

- Collaboration (Institutes – universities – businesses/industry)
- Robustness (size, diversity/diversification)
- Clear (not too high-level) strategies

Do you and your organization recognize the findings in the national report?

In general good correlation between own views and experience, and findings in the report

- Acknowledges the role of Institutes, bringing forward strong industrial and social impact through applied and industry-oriented research and innovation

- Points out that low basic funding guides the Institutes in direction of higher TRL/applied and industry-oriented research, with weakened opportunities for fundamental research and associated publications

- Close collaboration with industry foster *relevance* in research

- Size matters for robustness of research groups; capacity to act proactively/dynamic towards new trends and opportunities, and mobilization towards EU and other international networks. Note; *size* may be (truly is) an expression of quality over time.

- Close collaboration Institute-University is a clear strength (ex. SINTEF-NTNU), brings *relevance* to universities and access to fundamental research (and infrastructure) to the Institutes

Are there any surprises in the report?

While acknowledging the strong industrial and societal impact of applied and industry-oriented research, is seems somewhat contradicting recommending increased support only to fundamental research.

«… not reducing the effort in applied work» is a surprisingly wague/defensive statement. The institute sector is a tool for industrial and societal transition, in general acting much more dynamic to trends and needs than the university sector. So strenghtening of fundamental research should imply also strengthening of applied research. European (and national) policies clearly address the importance of strenghtening industry competiviteness (green and digital transition), through faster innovation. More actual now than ever.

The statement *"One reason SINTEF can operate with much lower institutional funding than TNO or VTT is its symbiotic relation with NTNU, which is most visible in the large number of (primarily) NTNU PhD candidates co-supervised, or in practice working in the labs, at SINTEF",* is misleading.
That said, the collaboration strengthens SINTEFs scientific base (competence development) which in turn improves SINTEFs competitiveness, both on the national and international arenas.

Are there any important aspects that you miss in the report?

A description and a discussion of the various funding/project scheemes & types (from RCN) is lacking. The level, arrangement and balance between those (from competence-building project to innovation projects), affect the Institutes to a large degree. Last years framework conditions for collaborative projects (institutes – industry) has weakened.

A discussion of the roles of Universities and Institutes; are they clear enough, are they overlapping to some extent, what role has the different Minitries in putting up harmonized framework conditions? Should the Ministry of Trade, Industry and Fisheries (who manages the institute sector) have been a part of the «customer group» for the evaluation?

The importance of the SFI and FME center-instruments should have been a more visible part of the discussion.

Some fields of research under MIT, e.g. materials technology, physics and chemistry, have also been evaluated under EVALNAT, indicating that the size of the research-field is larger than what is envisioned through the EVALMIT evaluation. Could/should have been discussed.

As a response to the EU policies on Materials, Advanced Manufacturing, Critical Raw Materials and Digitalization, research within all aspects of *enabling technologies* should be strengthened. Both fundamental and applied research.

Do you consider the recommendations as relevant for developing the field of MIT? What is the most important thing to do in this respect?

Recommendation1: ***improve the research systems ability to cope with and exploit change -> move flexibly and rapidly tackling more radical change needs***

- Relevant. Strenghtened collaboration scheemes Institutes – Universities – Industry/businesses, should be a clear path as a response.

Recommendation2: ***ensure that the foundations in fundamental research of the applied fields are sufficiently solid***

- Relevant. However, it must not go at the expense of the Institutes foundations for applied research – also this must be strenghtened

Recommendation3: ***ring-fence research funding for the smaller and newer institutions for further capacity building***

- Fragmentation of research should be avoided. The report demonstrates the importance of critical mass.

Recommendation4: ***establish and maintain presence in international networks***

- Relevant: The national support system for EU participation must be secured for the future and strenghtened. Predictability is of crucial importance (Retur EU).

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