



Doctoral Education Network DENSE of SAFER2028

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Introduction: New Funding Instrument and Networking

- Addition to Nuclear Energy Act chapter 7a (“nuclear tax” for developing competences and knowhow)
- New elements in SAFER2028:
 1. Funding for full-time doctoral studies (4 years or final 4 – 6 months)
 2. Funding for scientific activities, training and networking of doctoral students
- Estimated share of the SAFER programme funding: 5 – 10%

History: YTERA Doctoral Education Network 2012–2016

- Participants: Aalto, LUT and Univ. of Helsinki
- Funding from Academy of Finland and Ministry of Education
- Salary funding for 7 full-time doctoral students + operational funding
 - Additionally ~35 associate members
- Additional funding from universities and power companies
- Steering group incl. universities, VTT, regulators, industry

- Contributed to 20+ doctoral theses by 2018



History: YTERA Doctoral Education Network 2012–2016



Käärmeitä ja kovapanosammuntoja 20.-22.5.2012

YTERAn ensimmäinen vuosiseminaari Tvärminnessä

YTERA päättyy kesken nousukiidon – miten käy ydinalan tutkijakoulutuksen?

Verkostomainen Ydintekniikan ja radiokemian tohtoriohjelma YTERA saatiin käynnistettyä vuoden 2012 alussa. Rahoitus saatiin nelivuotiskaudeksi ja tarkoitus oli hakea jatkorahoitusta, mutta tohtorikoulutuksen kansalliset rahoituskuviot muuttuivat. Nyt opetus- ja kulttuuriministeriö jakaa yliopistojen määrärahat könttäsummana, ja yliopistot itse päättävät rahojen käytöstä. Autonomia lisääntyi, mutta rikottiinko samalla toimivaksi todettu tutkijakoulutussysteemi?

- M. Palmu, J. Ala-Heikkilä: YTERA's first annual seminar in Tvärminne (in Finnish), https://ats-fns.fi/images/files/ydintekniikka/atsyt_2012_2.pdf#page=9
- J. Ala-Heikkilä: YTERA ends in mid-flight – what now? (in Finnish), https://ats-fns.fi/images/files/ydintekniikka/atsyt_2015_3.pdf#page=18

DENSE vs. YTERA

Similarities:

- Direct salary funding of 5 – 8 doctoral students
- Funding for research activities of >30 doctoral students
- Networking among doctoral students and within nuclear field
- Platform for research collaboration

Differences:

- All universities vs. 3 universities
- Part of research programme vs. autonomous entity
- Salary funding decisions by SAFER MG vs. YTERA steering group
- Relevance wrt Framework Programme vs. relevance for research group

Operational Funding: DENSE Coordination Project

Activities of **all network members** to be funded through DENSE coordination project:

1. Participation in conferences, workshops and summer schools
 2. Research publication-related costs
 3. Research exchanges and visits (mobility) of both short (1–2 weeks) and long duration (up to 6 months), including infrastructure use-related costs
 4. Networking events, such as annual seminars where students and members of the professional community meet and present
- Managed by DENSE Steering Group (to be nominated)
 - Coordinator: Jarmo Ala-Heikkilä, Aalto University (jarmo.ala-heikkila@aalto.fi)
 - **Supervisor or doctoral student: enrol to DENSE network contact list!**

Salary Funding in SAFER

- **General project funding still available like in KYT and SAFIR (old)**
 - Mainly applicable for part-time doctoral students
- **DENSE salary funding for doctoral students (new)**
 - Full-time doctoral students at universities (4 years)
 - Thesis finalization (4 – 6 months) of part-time doctoral students
 - Model: excellence projects with multiyear funding
 - Full cost model, funding level 100% or 70% (TBD)
 - Evaluation of project plans and ranking by SG-DENSE
 - Funding decisions by SAFER MG
 - Volume estimate: 5 – 8 person-years per year

Evaluation of DENSE Project Proposals (Draft)

1. Scientific level of the proposal
2. Relevance of project proposal for scientific goals of SAFER2028 programme (in the long term)
3. Recommendation letter from a supervising professor
4. Recommendation letter from a stakeholder organisation if applicable (industry, regulator)
5. International network connections
6. Overall participation of the host organisation in the wider SAFER2028 research programme
7. Complementary funding/in-kind funding already promised from other sources
8. Diversity of topics and disciplines within the Doctoral Education Network

Selection Process for Salary Funding

- DENSE puts stronger weight on scientific level as a quality criterion
 - The mindset of the SAFIR/KYT programmes has been a challenge for universities: emphasis on practical applicability, not fundamental research
- Relevance for SAFER programme also requested from PhD projects
- Diversity is a criterion in evaluation of PhD project proposals
- SG-DENSE will have members from universities and research organizations in addition to stakeholders
 - Outside experts may be consulted
 - Multidisciplinary SG supports multidisciplinary projects (if proposed)

Conclusion: New Funding Instrument and Networking

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Thank you for your attention – questions?