

# NoE and IP on



MÄLARDALENS HÖGSKOLA

# Embedded Systems Software Design

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## MRTC

MÄLARDALEN REAL-TIME  
RESEARCH CENTRE

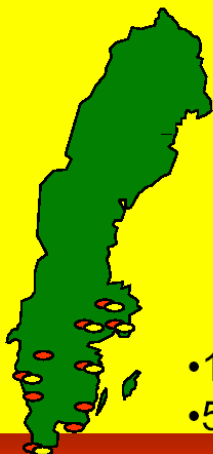
## What is ARTES?

A network for Real-Time Research and graduate Education in Sweden

Volume: 88 Msek (~€10M) 1998-2002

28 companies

- ABB
- Alfa Laval
- Arcticus
- Carlstedt R&T
- Datex-Ohmeda
- ENEA
- Eriesson
- IAR
- Mecel
- Saab
- TietoEnator
- Volvo
- ...



18 research groups  
(9 Universities)

- KTH
- SICS
- MdH
- Skövde
- Chalmers
- Halmstad
- Linköping
- Blekinge
- Lund

- 120+ PhD-students
- 50+ Researchers

Västerås





- Efficient and predictable SW development!
- **Component-based** development of critical applications
  - conflicting requirements, e.g.
    - safety vs. cost and time-to-market
    - power vs. performance
  - reuse + 3rd-party components
  - proper design methods and architectures
    - Generic Component Technology
    - Modelling, analysis, and verification
  - Product-lines and platforms

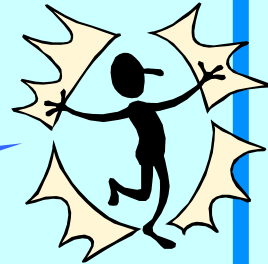


# “Graduate Education”

## Making researchers out of students

- Infrastructure improving quality in Grad.Ed.
- Open calls – evaluations – decision

Support to conf.,  
seminars & meetings



Grad.stud.  
conference

Industrial  
seminars

Graduate  
courses

Mobility  
support

Task  
forces

Summer  
School

International Academia  
and Industry stays

Specific problem  
Limited time  
10-20 persons