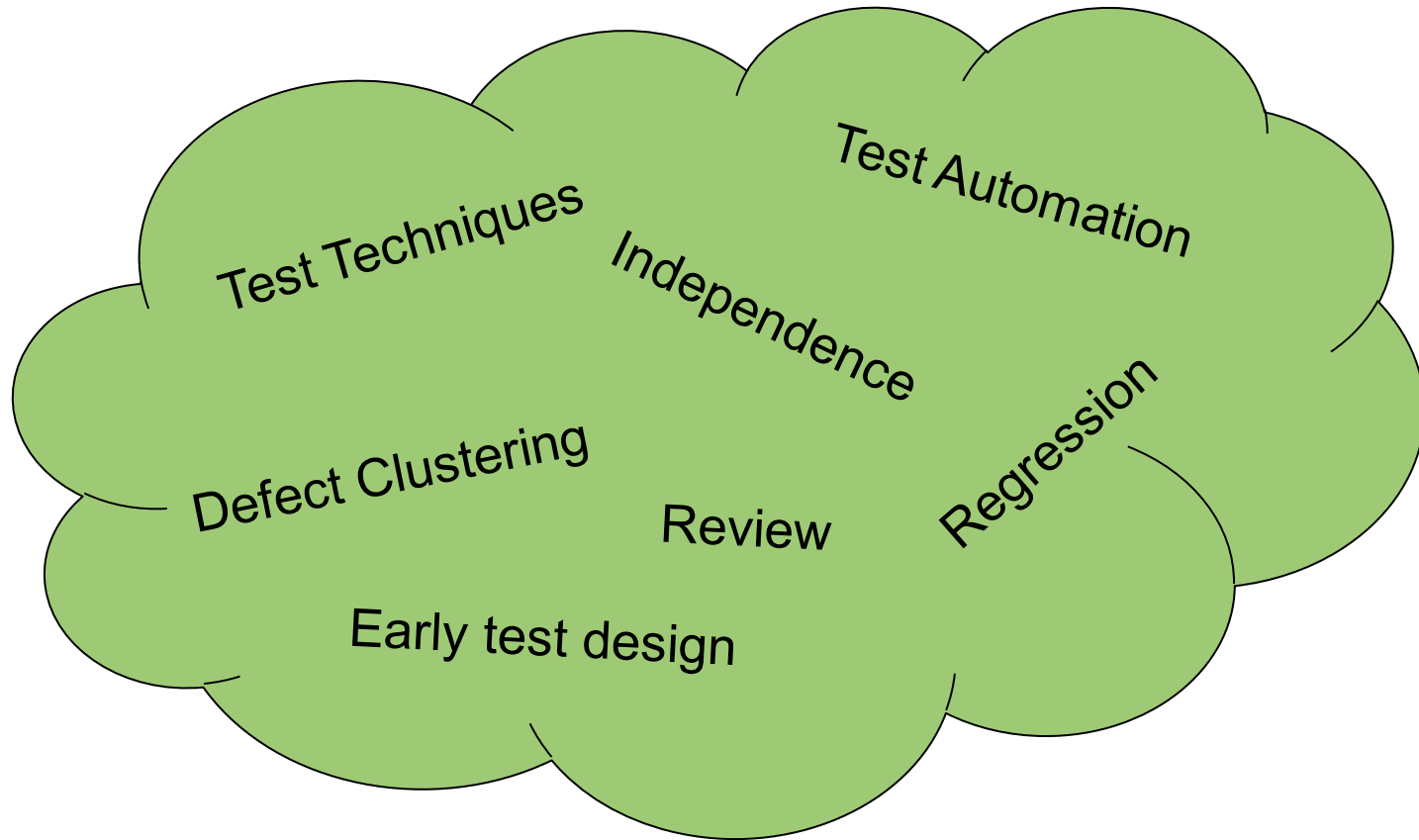# Soft Factors within Testing

Improvement of test process and methods – a sub-optimization?

Mats Grindal
(mats.grindal@enea.com)

ENEA

Introduction

Test Techniques
Independence
Test Automation
Defect Clustering
Review
Regression
Early test design

Today we know a lot about testing…!

ENEA

# …but do we pay attention to <u>all</u> important areas?

- Test Process Improvement (TPI) – selected key areas
  - 10: Office environment
    - Adequate and timely office environment
  - 11: Commitment and motivation
    - Budget and time for testing, testing integrated in project
  - 14: Communication
    - Internal and project communication about product and process quality

- My experience
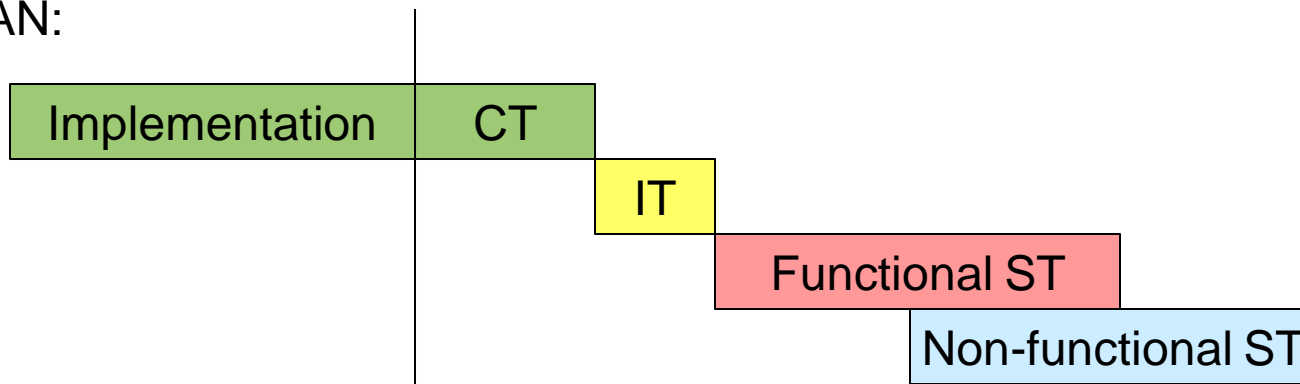 - Organizations are very rarely interested
  - There are also "gaps" in TPI
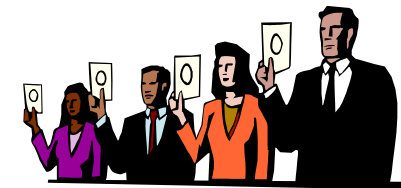
This presentation

- Highlight some neglected areas
- Based on experience
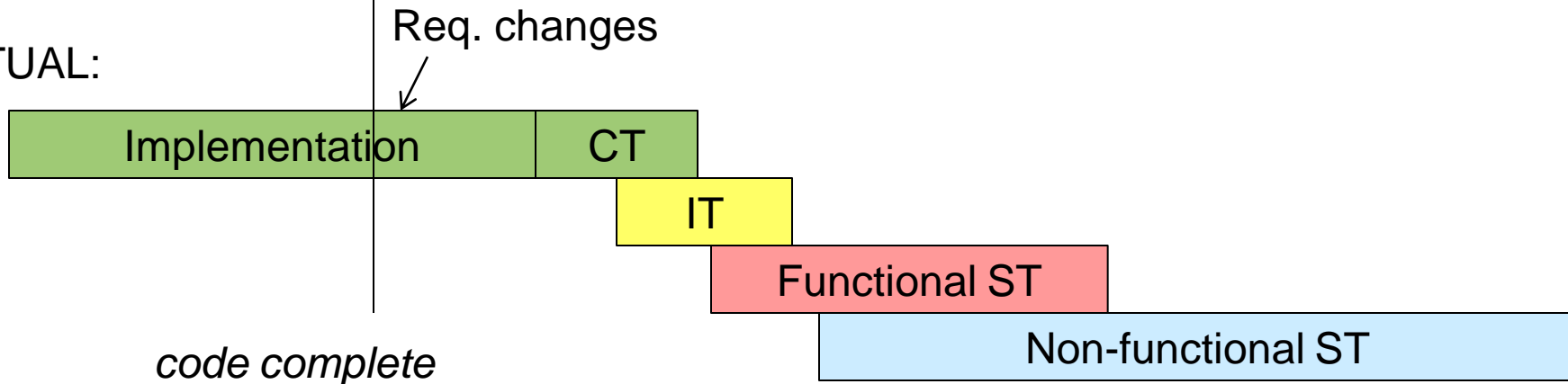- Good and bad examples and some lessons learned

Copyright © 2010, Enea AB

ENEA

Story 1: Counter-productive testing

Copyright © 2010, Enea AB

Know the purpose of your testing!

- **Starting test execution without entry criteria satisfied?**
  - Time was gained in function test
  - Time was lost in non-function test
- **The purpose of your testing affects your room to act**
  - The choice of test methods is affected!

- **What can(not) testing do**
- **Common purposes of testing**
  - Support quality – trigger defect corrections
  - Measure quality – are we ready for release
  - Increase confidence – show that the software works

ENEA

Story 2 & 3: Important to Know the Domain

Know and Cooperate with Your Customers!

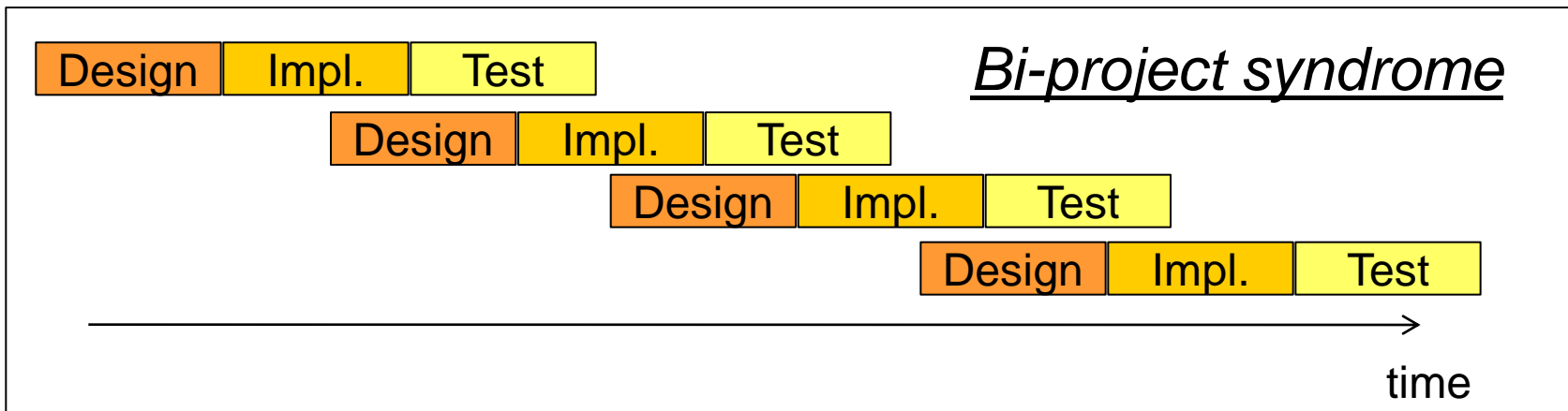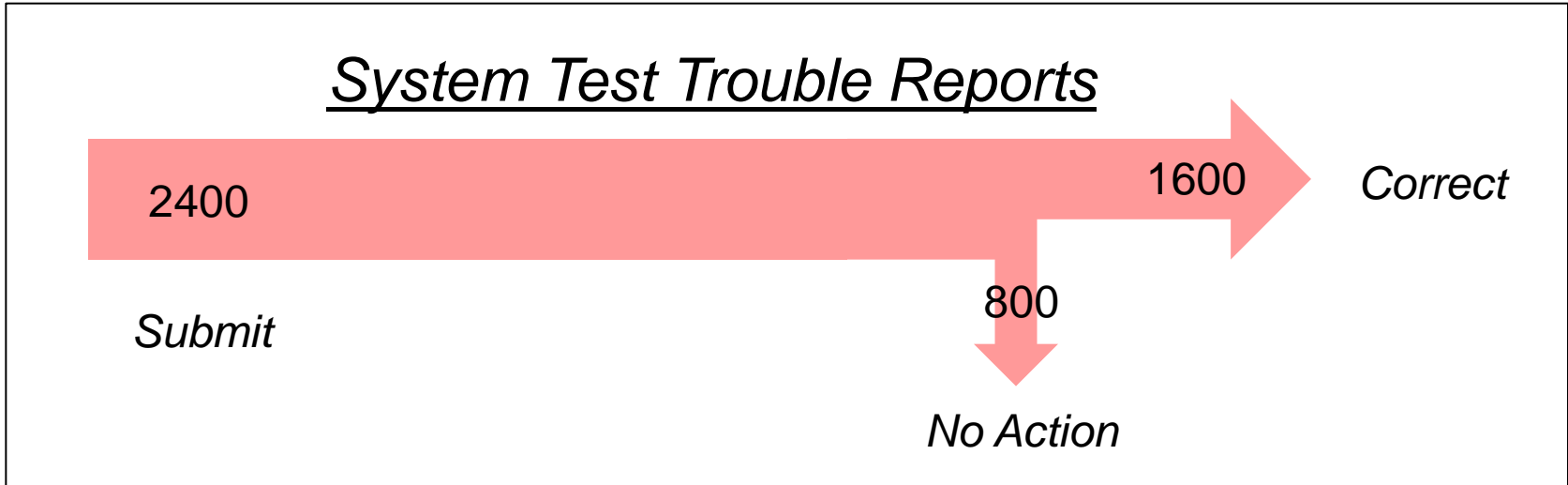- Spend time with your customers

- Add users to your test team

- Use your own products

Story 4 & 5: Information Exchange

System Test Trouble Reports

2400

1600   _Correct_

Submit

800

No Action

Design | Impl. | Test

Bi-project syndrome

Design | Impl. | Test

Design | Impl. | Test

Design | Impl. | Test

time
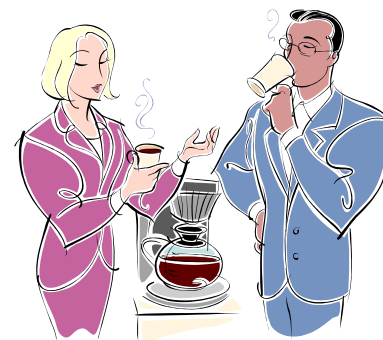
ENEA

Make sure testers get information!

- **Tools and processes must guarantee information exchange**
  - If you don't get invited, invite yourself!

- **Encourage network building**
  - Mentorship
  - Informal competence groups
  - Photos and names
  - Coffee breaks!

- **Off-shoring**
  - Extensive exchange – you need to spend time together

ENEA

Story 6: Attitude Towards Test vs. Tester's Life Expectancy

- **Manager at company 1:**
  - *"We employ people in system test so they can acquire information and then transfer to a better position"*

- **Company 2**
  - The "oldest" tester had been employed 6 months

R.I.P.
tester
* 2010-03-28
† 2010-07-15

- **Manager at company 3:**
  - *"We don't have any testers, if we need to test we make our developers test…."*

ENEA

Test organizations need experienced testers

- **Work on attitudes**
  - Educate management and other stakeholders
  - Counting heads is too simple
  - Encourage defect finding
  - All should be welcome

- **Work on continuity**
  - Define career paths
  - Plan projects so testers don't always have to sacrifice their vacations
  - Fight negative stress
  - Have fun!
  - Make sure there are sufficient challenges
  - Job rotation but within reason

Managers, ask your testers how many days per month they honestly like going to work

YOUR CAREER →

ENEA

Happy 15th birthday SAST!

ENEA