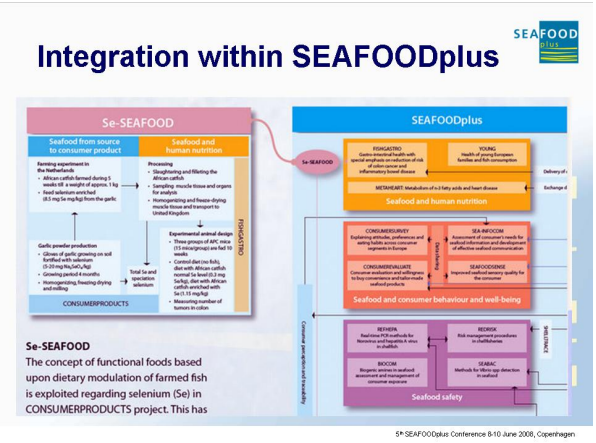
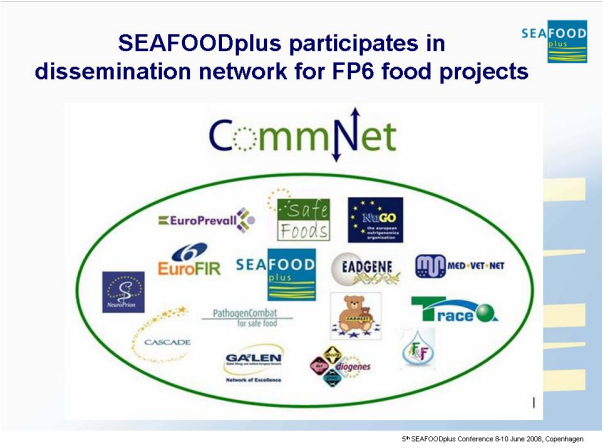
Integration, training and dissemination within SEAFOODplus

Joop Luten
Nofima Marine, Norway





The objective of SEAFOODplus is to make it possible to reduce health problems, to prevent major diseases and to increase well-being among European consumers by using the opportunity to apply the benefits obtained through consumption of health promoting and safe seafood products of high eating quality.

In order to address this objective six research areas are addressed each with its specific R&D projects: (1) Seafood and human nutrition, (2) Seafood and consumer behaviour and well-being, (3) Seafood safety, (4) Seafood from source to consumer product, (5) Seafood from aquaculture and (6) Traceability to ensure consumer confidence. One of the tasks in SEAFOODplus is to stimulate integration of R&D activities between projects of the different areas.

As part of the **training** programme about 50 scientists have participated in exchange visits between project partners in the same project, between different projects in the same R&D area and between projects in different R&D areas.

One of the important success criteria for scientific projects is the number of peer-reviewed **scientific publications**. In the period 2005-2007 the total number of registered scientific publication is 75. Other dissemination activities include articles in media, internet communication and participation in the network **COMMNET** for FP6 food projects. Four PhD students have defended their thesis based upon results from SEAFOODplus projects.

Three new **integrated R&D initiatives** were taken in SEAFOODplus: (1) ETHICOD, (2) Se-SEAFOOD and (3) FPH-animal. The concept and the outcome of ETHICOD will be highlighted in two other separate presentations during the final SEAFOODplus conference. The concept of functional foods based upon dietary modulation of farmed fish is exploited regarding selenium (Se) in the CONSUMERPRODUCTS project from the R&D area 'Seafood from source to consumer'. This has lead to the Se-SEAFOOD experiment where African catfish is farmed using feed containing anti-carcinogenic organo-Se enriched garlic. The health beneficial properties of the Se enriched African catfish is now tested in *in-vivo* experiment carried by a partner in FISHGASTRO from the R&D area 'Seafood and human nutrition'.

The *in-vitro* testing of several fish protein hydrolysates (FPH) in PROPEPHEALTH has led to the selection of a few FPH with promising anti-hypertensive, calciotropic and secretagogues activities. Due to the flexibility of 18 months planning periods in SEAFOODplus it was possible to design two animal experiments to test the efficacy of the FPH. The design of both studies is based upon discussion between partners from the the PROPEPHEALTH project and the R&D area 'Seafood and human nutrition'. One *in vivo* study shows that FPH from saithe can reduce food intake, body weight, glychemic index and insulin level and increase levels of CCK. One *in-vivo* study about hypertensive activities from FPH is on-going.