The Dutch-Flemish comprehensive approach to HLT stimulation and innovation: STEVIN, HLT Agency and beyond

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• Context: innovation theory/policy
• Who: relevant actors
• What: set of complementary instruments
• How: structures and bodies
• How much: the financial balance
• Market failure: a one stop shop for resources
• System failure: an info desk and PR&Comm WG
• All in all: conclusion
• What’s next: a new joint programme?
• HLT enables communication in the knowledge society
• deploying R&D HLT results in products or services and achieving a competitive advantage (to increase a company’s profits)

• innovation system approach:
  - various types of autonomous but interdependent actors
  - market failure
    • industry doesn’t invest
      (costs are too high compared to potential income)
  - system failure
    • insufficient knowledge exchange
      (not enough technology transfer from university to industry)

→ government steps in
  triple helix: interplay of academia, industry and government
• NTU = intergovernmental policy organisation for matters related to Dutch
  - language of 21 million people
  - structural funding by depts. of (mainly) education and culture
  - pragmatic approach to language policy: emphasis on language user
  - ultimate goal: all language users of Dutch have to be able to use their own language in all situations

• Flemish & Dutch governments agreed to improve / secure position of Dutch
  - programmatoric funding by depts. of economy and science
  - set up a common platform between administrations
  - goal: stimulate technology sector (academia and industry) to develop HLT resources for Dutch and integrate Dutch in ICT
    <-> the (electronic) Gütenberg effect
One stop shop for HLT for Dutch resources

HLT info desk

HLT Agency

Awareness raising and information dissemination on HLT for Dutch

STEVIN R&D programme
creating HLT for Dutch resources

funded by EWI, (IWT, FWO) [FL] & EZ, OCW, NWO [NL]
how

Nederlandse Taalunie

HLT Agency

HLT Info Desk

HLT Pricing Committee

HLT PR&Comm WG

Government organisations FI / NI

Academic institutions

Companies
• STEVIN (11,4 M€: 2005 - 2011)
  - jointly funded by the Netherlands (7,6 M€) & Flanders (3,8 M€) [www.stevin-tst.org]
  - coordinated by the NTU
    • common pot funding scheme
    • joint submission, evaluation, monitoring and acceptation procedures
  - R&D program to
    • promote strategic research and develop essential resources for Dutch that are missing
    • raise awareness of HLT results and stimulate the demand of HLT for Dutch products
    • support the maintenance and distribution of HLT resources
• **STEVIN R&D projects:**
  - strategic research [www.stevin-tst.org/projecten]
  - Innovative
  - basic resources for Dutch
  - *at LREC08: P1.6, P4.1, O9.4, O20.1, O20.5, O23.2, P17.5, P21.1, O34.5, O41.4, P27.2, P28.9, O47.3*

• **STEVIN demonstration projects:**
  - industry (SME) stimulation
  - off the shelve technology
  - visibility [www.stevin-tst.org/pers]

• **STEVIN education activities:**
  - raising awareness amongst students
  - HLT for Dutch popularisation [www.kennislink.nl]

• **STEVIN networking grants**
  - spreading knowledge
  - bringing potentially interested/interesting parties together

• **STEVIN master classes:**
  - educate industry and government officials
Balance (€): Netherlands (64%) vs. Flanders (36%)
Industry (18%) vs. Academia (82%)
• Results of the STEVIN R&D projects
  - ownership goes in principle to the NTU
  - open source agreements are allowed
    • liveliness of the community of developers
    • always some formal link with the HLT Agency
• Pricing policy for HLT Agency products
  - in line with basic idea of open innovation:
    • joint development of new knowledge (co-competition)
    • diffusion of knowledge
  - Pricing Committee recommendations
    • free for non for profit use (except handling costs ?)
    • easy entry but fair price for for profit use (which ?)
    • lump sum (but also allow royalties ?)
• mere availability of HLT for Dutch resources is not enough
• create awareness of added value and potential

• HLT info desk is complemented by PR&Comm WG
  - develop common branding ("HLTD inside" label) and PR initiatives, while acknowledging all funding partners
  - stimulate creation of networks and clusters of related technology companies around HLT as enabling technology
  - collaborate more closely with HLT Agency
  - make use of other (inter)national government structures
• successful R&D programme STEVIN:
  - creation of a transnational research community
  - connecting companies with research groups
  - creating a BLARK (and more) for Dutch
  - stimulating industry
• established HLT Agency
  - taking in and distributing STEVIN results (and other resources)
  - offering help desk services
  - managing IPR
  - supported by pricing committee to advise with exploitation of results
• expanding HLT info desk
  - near monthly e-news letter (has become a reference)
  - web site with overview relevant Flemish and Dutch HLT actors
  - assisted by overall PR&Comm WG
  - co-organising events (“Language@Work” industrial HLT for Dutch fair)

→ There is always room for improvement
- evidence based policy making
  - scientific evaluation
  - economic impact assessment

- some ideas
  - horizontal innovation
    - involve other dept. - e.g., healthcare, labour, ...
    - societal relevance - e.g., comfort for ageing people
  - innovative procurement
    - government as launching customer
      - e.g., government buys HLT solutions for language tests on immigrants
  - organise technology forecast exercise / stakeholders meetings
    - many relevant actors/organisations are involved
    - gives weight to outcomes/recommendations
    - results in an industry demand driven technology roadmap

- institutional challenge: align policies/instruments of Dutch and Flemish government organisations
what’s next?

- Potential topics for a follow up programme
- Suggested by:
  - the Netherlands (experts)
    - health care and wellness (when ageing)
    - Cultural heritage
    - E-government
    - (serious) gaming and leisure
    - Security
    - Media mining
  - Flanders (stakeholders)
    - Independently living
    - E-health
    - E-government
    - communicatively impaired people
    - Education (including Dutch as 2nd language)
    - Semantic web
    - Traffic security
  - NTU (policy makers)
    - HLT for education
    - HLT for the government (clear language)
    - HLT for communicatively impaired people
eight sessions for “Language@Work”  
(industry fair on HLT for Dutch: 19/11 in Brussels)
1. automotive, logistics and mobility
2. translation and translation aids
3. language learning and testing
4. business intelligence
5. effective communication for civil servants
7. e-government
8. life long independently living