Ministerie van Onderwijs, Cultuur en Wetenschap

The Netherlands and Horizon 2020 – our national support system

Austrian launch Horizon 2020
Vienna, 21 January 2014

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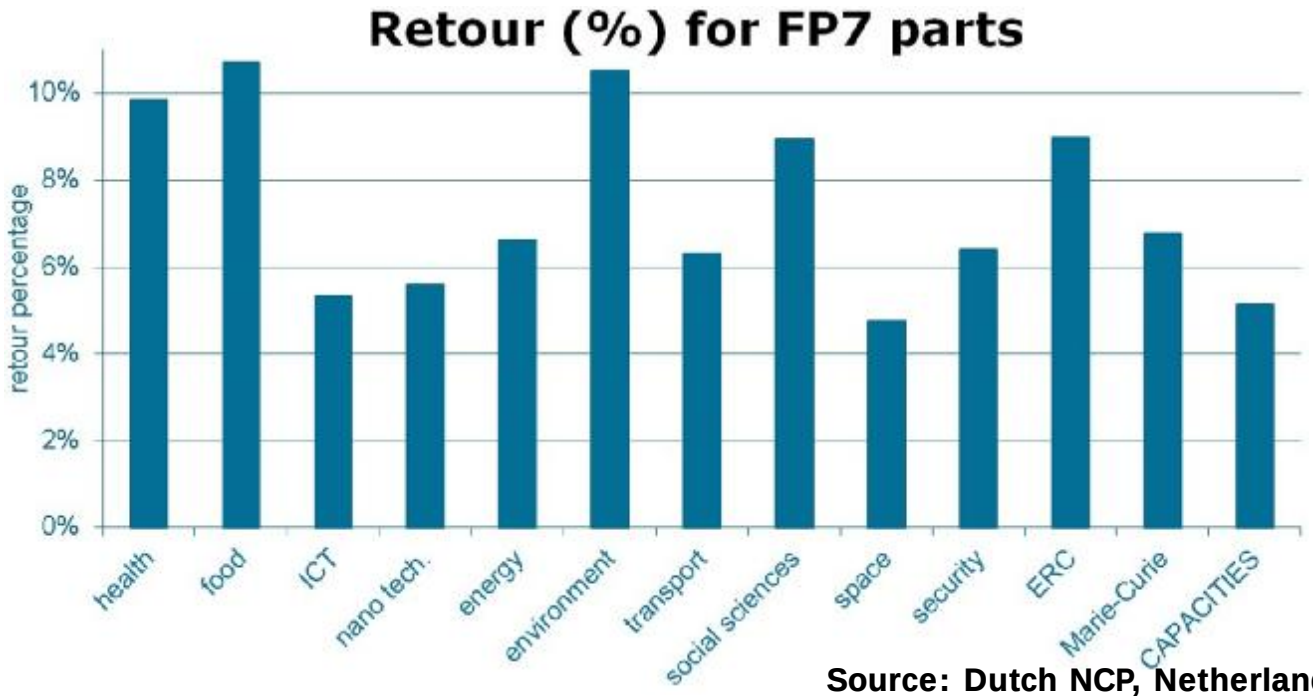
Position of the Netherlands in the EU Framework Programmes (1)

- **Overall during FP7 increasing towards 7.4 %**
- **"From each invested EUR, we get 1.48 EUR back"**



SEVENTH FRAMEWORK PROGRAMME

Source: Dutch NCP, Netherlands Enterprise Agency

Position of the Netherlands in the EU Framework Programmes (2)

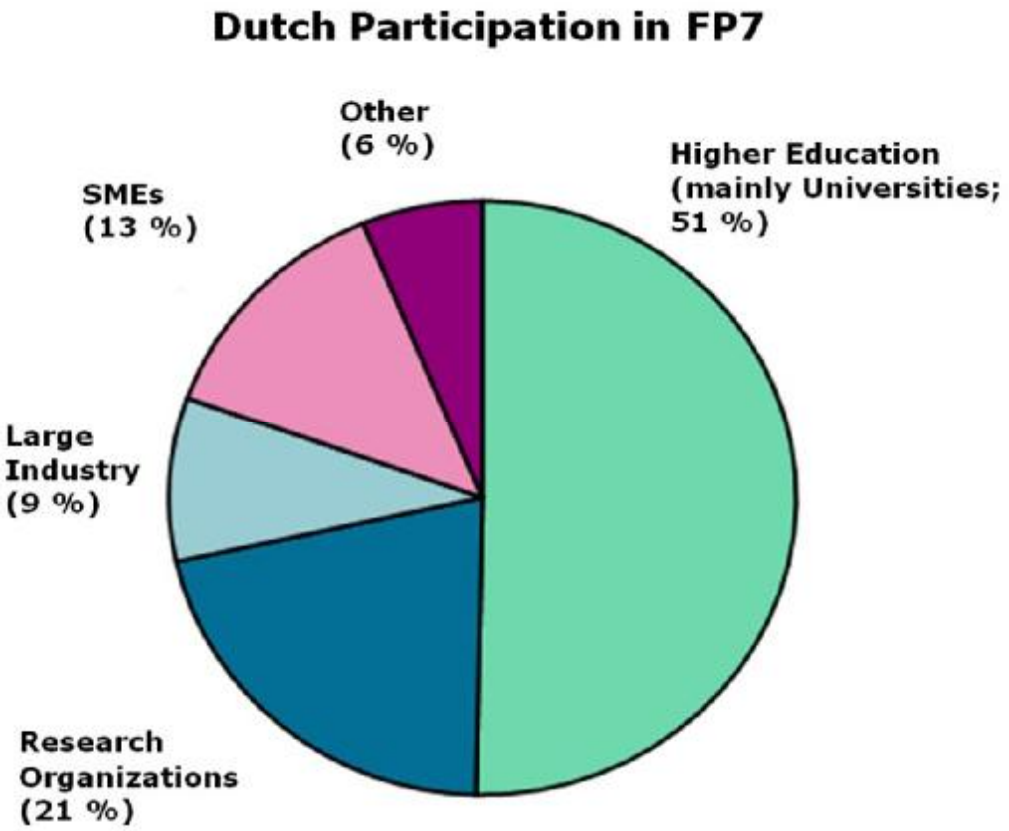
Up to now: 44,24 Billion EUR total contract contributions

Ranking of participation of countries (absolute retour)

nr	country	country name	succesfull projects	succes%	succesfull contribution (M€)	contract contribution (M€)	retour%
1	DE	Germany	8.844	20,4%	7.073	6.436,8	16,0%
2	UK	United Kingdom	10.155	20,8%	6.755	6.142,1	15,3%
3	FR	France	7.177	22,3%	4.988	4.578,5	11,3%
4	IT	Italy	6.311	16,7%	3.592	3.218,7	8,1%
5	**NL**	**Netherlands**	**5.044**	**22,9%**	**3.258**	**2.903,3**	**7,4%**
6	ES	Spain	6.306	17,9%	3.201	2.848,6	7,2%
7	CH	Switzerland	3.372	23,7%	1.987	1.815,4	4,5%
8	BE	Belgium	3.679	22,4%	1.779	1.575,9	4,0%
9	SE	Sweden	3.107	21,2%	1.726	1.520,0	3,9%
10	AT	Austria	2.463	21,0%	1.174	1.046,1	2,7%

Source: Dutch NCP, Netherlands Enterprise Agency

Position of the Netherlands in the EU Framework Programmes (3)



Source: Dutch NCP, Netherlands Enterprise Agency

Global overview of the Dutch participants

Higher Education (51 %)

- **Universities: 13 (+1), including three TUs and Wageningen UR**
- **Universities of Applied Science – *still very limited participation***

Research organizations (21 %):

- **TNO and other 'applied research organizations' (RTOs) ≈ *2/3***
- **Research Council (NWO) institutes**
- **Royal Academy of Sciences (KNAW) institutes**
- **Governmental research institutes (KNMI, RIVM)**

≈ *1/3*

Large Industry (9 %)

- **Mainly Philips, at distance others, like NXP, DSM, Unilever, DAF, offshore companies, ...**

SMEs (13 %)

- **Various; notably in biomass, biotechnology, fuel cells, ...**

How can their good participation be explained?

- **The overall high quality of research in the Netherlands;**
- **Some historic 'peaks in the Delta': Philips and high tech around Eindhoven, Agro-research around Wageningen, Logistics around Rotterdam, TNO, Astronomy etc.;**
- **Open mindset:**
  Dutch researchers tend to do a lot of networking;
- **Relatively low (private) investments;**
- **Pressure to 'go European': innovation policy, higher education policy and science policy, internal policy of organizations;**
- **Instruments that prepare researchers for Europe: e.g. NWO 'veni, vidi, vici'.**

The Dutch research system in a nutshell (1)

- **Universities - tasks: Education, research, knowledge dissemination;**
- **Largest part of the budget is lump-sum funding of universities: 5.88 billion EUR/yr (of which ca. 1.7 Billion for research);**
- **Researchers acquire ca. 430 million EUR/yr from research council (NWO);**
- **They acquire roughly the same amount from contract research (incl. EU FPs!);**
- **Research personnel funding:**
  ca. 50 % from lump-sum, 25 % research council,
  25 % contracts and EU funding;
- **Companies invest roughly the same**
- **as the total public sector: around 5 Billion EUR/yr.**

The Dutch research system in a nutshell (2)

- **NWO institutes: 162 million EUR;**
- **KNAW institutes: 122 million EUR;**
- **RTOs:**
  - **TNO: turnover 564 million EUR, 1/3 'demand-driven', 1/3 competion-based funding, 1/3 contract research;**
  - **ECN (energy), MARIN (maritime technology), NLR (aerospace), Deltares (water): turnover together 353 million EUR;**

- **Agricultural Research Institutes (DLO), connected with Wageningen;**
- **Other: Various ministerial instuitutes (RIVM, KNMI).**

The Dutch research system in a nutshell (3)

Innovation policy: more focus on 9 key economic sectors:

- **Agro, life Sciences, logistics, creative industry etc.;**
- **Main goals: public-private cooperation and Increase of private investment in research;**
- **Change from funding towards fiscal measures.**

Higher education policy: Focus and diversification to stimulate societal relevance of universities. Connection with EU programmes and key economic sectors is a performance indicator – performance agreements.

Science Policy – some key priorities:

- **Ensuring a good balance: frontier science and application;**
- **'Trust in science';**
- **Open access to publications…and maybe later more?**
- **Large research facilities.**

BBMRI
Biobanking and Biomolecular Resources Research Infrastructure

Support systems from the participants

Our research field is well organised:

- **Liaison officiers universities meet in VSNU (universities' association);**
- **Association of the knowledge organizations in Brussels: Neth-ER;**

  'aim (…) is to influence the European policymaking process in an adequate way in order for the Dutch knowledge field to optimally use European policy and instruments that Europe has to offer'

- **VNO-NCW (industry and employers' association);**
- **Offices of individual companies, sectors, regions, cities, etc.;**

- **Participation in LERU, EUA, ScienceEurope, EARTO, ScienceEurope, UASNET, …**

'Big enough to have some mass and competition, but small enough to ensure that everybody knows eachother'

Support systems from the participants

Support system at the government level (1)

- **Ministry of Education, Culture and Science (OCW) and Ministry of Economic Affairs (EZ) are together responsible for Horizon 2020, and coordinate government input; We meet all field organizations regularly;**

- **Policy officers of OCW, EZ and other relevant ministries meet eachother regularly for strategic issues (4 times a year), if necessary at 'high level';**

- **Together we fund EIOI (Centre of Expertise International Research and Innovation, Netherlands Enterprise Agency), the NCP organization, and partly Neth-ER.**

Support system at the government level (2)

- **Programme Committee members are from various ministries, each assisted by their individual NCPs and experts. They also meet regularly;**

- **Each Programme Committee has a 'klankbordgroep' / consultation panel with liaison officers, research leaders, companies, NGOs, people from the key economic sectors and where possible 'end users' (e.g. patient associations);**

- **Tasks of the consulation panel members:**
  - **to discuss the work programmes;**
  - **define priorities;**
  - **obtain and redistribute information;**
  - **motivate stakeholders;**
  - **connect various EU and national policies.**

Other forms of government support

Cofinancing / matching:

•Some large European initiatives require a national cofinancing investment

•Also, for nearly all EU grants, participants must bring in cofinancing/'matching';

***More difficult - abandoned full cost-option for calculating indirect costs*;**

- **The current government put in the coalition agreement the ambition to invest in fundamental research, among others by investing in cofinancing Horizon 2020 - Even increased in later autumn agreement;**

- **A budget has been designated for cofinancing Joint Programming and ERA-NETs-Plus, another budget for JTIs. A 'matching' budget is now under investigation - dependent on inventory 'matching pressure at universities'.**

Challenges (1)

- **Success in the past is no guarantee for the future: Things have changed! Other countries will also step up their efforts;**
- **Will participation stay as attractive as it is now?**
- **Horizon 2020 is challenge-based, and includes the entire span between frontier research and market uptake;**
- **Comitology must still develop: Input from member states through the 'shadow committees' was difficult (2-year work programmes, 'hidden topics', etc.);**
- **Getting researchers and other stakeholders in panels and expert groups becomes more important when projects/partnerships grow bigger;**
- **Usual suspects or new users? – Universities of applied science, SMEs, SSH, …**

Challenges (2)

- **We are still in the proces of connecting national and EU policies – also a question in the national parliament:**

  Key economic sectors vs. Challenges:

	1 Health, demographic change, well-being	2 Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bio-economy	3 Secure, clean and efficient energy	4 Smart, green and integrated transport	5 Climate Action, environment resource efficiency and raw materials	6 Inclusive, innovative and reflective societies	7 Secure societies
HEALTH	●	●	●	●	●		
AGRI & FOOD	●	●	●	●	●		●
WATER		●	●	●	●		●
LSTI	●	●					
CHEMICALS	●	●	●		●		
I-TSM	●	●	●	●	●	●	●
CREATIVE INDUSTRIES	●	●	●	●	●	●	●
ENERGY			●	●	●		
LOGISTICS			●	●	●		●

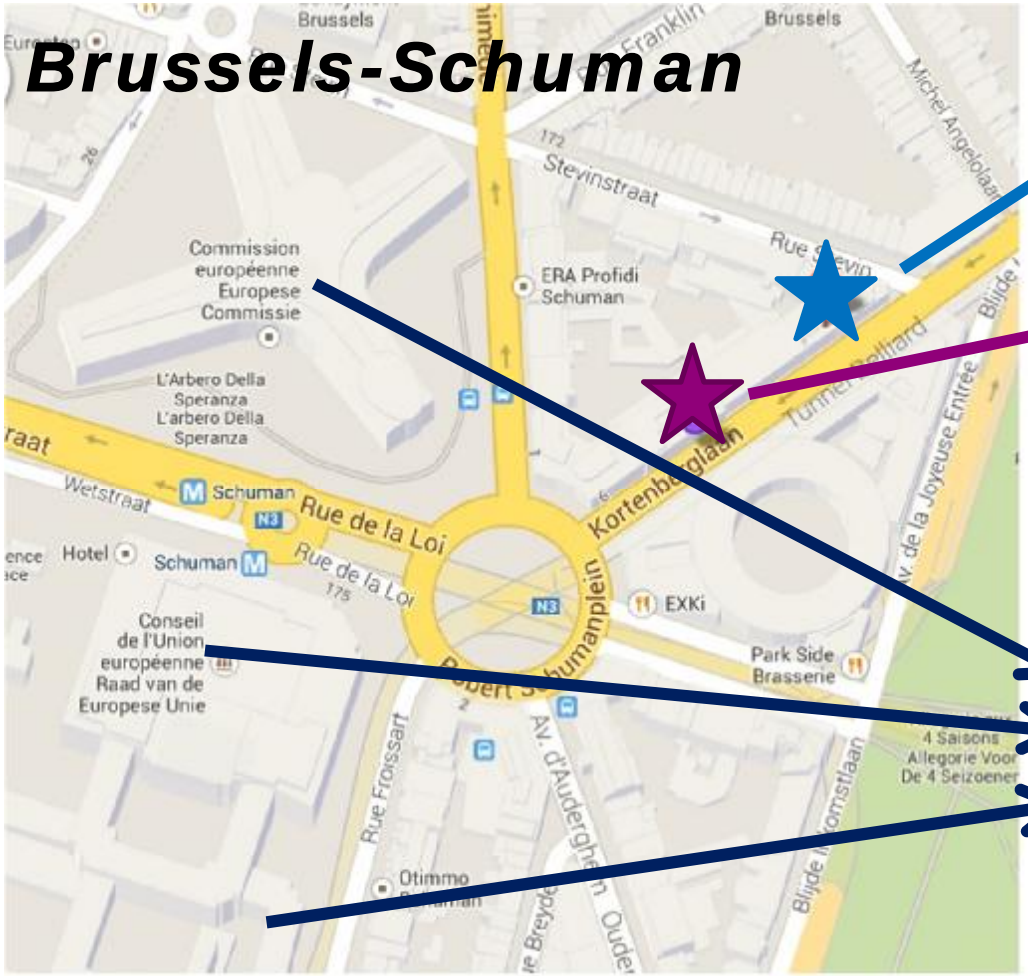
Challenges (3)

Universities vs. Challenges:

	Health, demographic change, well-being	Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bio-economy	Secure, clean and efficient energy	Smart, green and integrated transport	Climate action, resource efficiency and raw materials	Inclusive, innovative and reflective societies*
Erasmus University Rotterdam	●			●	●	●
Leiden University	●	●	●		●	●
Radboud University	●	●			●	●
University of Groningen	●	●	●		●	●
Tilburg University	●				●	●
Delft University of Technology	●		●	●		
Eindhoven	●		●	●		
University of Technology	●	●	●	●	●	●
Maastricht University	●		●	●	●	●
University of Twente	●	●	●		●	●
Utrecht University	●	●	●	●	●	●
UvA University of Amsterdam	●	●	●	●	●	●
VU University Amsterdam	●	●	●		●	
Wageningen University.						

Let's learn from each other...

...and be partners!



Austrian Permanent Representation
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Thank you very much for inviting me!

Hendrik Avercamp – ‘Winterlandschaft’ – Kunsthistorisches Museum Wien