Rathenau Instituut

RTOs Going Global

How does internationalisation of RTOs affect their public mission?

Diercks, G., Koens, L., Diederen, P., Faasse P.

Rathenau research on 'public knowledge institutions'

- Facts and Figures (Koens et al, 2016)
- Changes in their environment
 - Impact of new public management (Blankesteijn et al, 2014)
 - Decentralisation (Faasse and Koens, 2017)
 - Internationalisation

RTO's as hybrid organisations

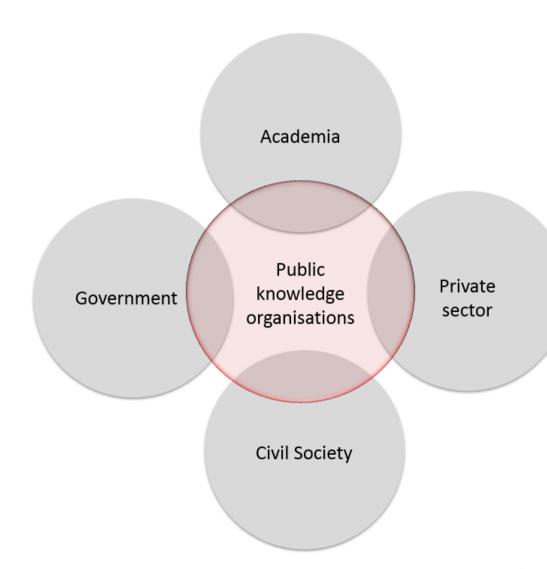
ybrid organisation:

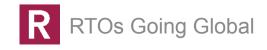
Occupy intermediary positions between public and private organisations

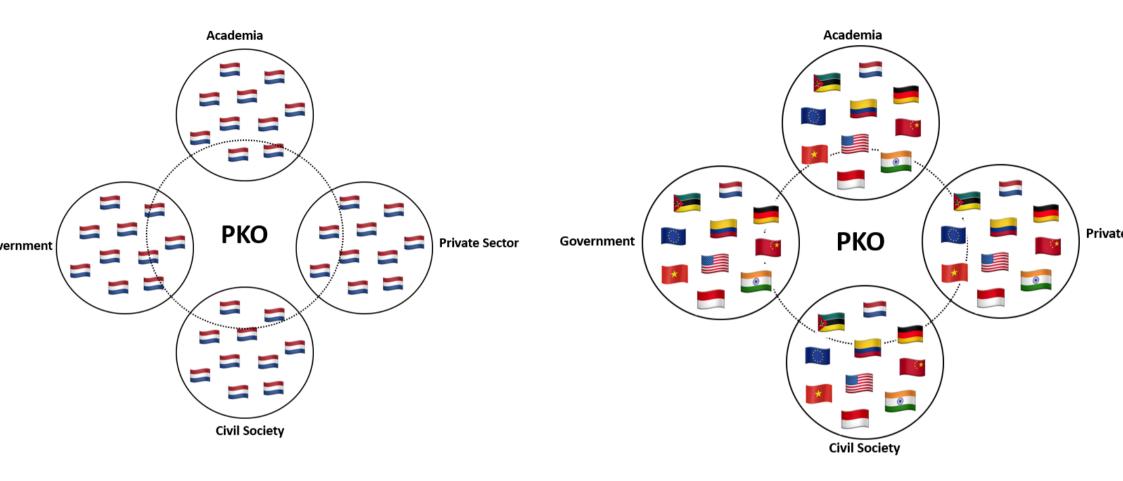
Operate at the boundary of science and non-science (Gulbrandsen, 2011)

ublic mission:

ne ability to produce knowledge that is cognised and valued by academia, government, e private sector and civil society







Internationalisation is changing the environment in which RTOs operate

Research question: How does it affect their public mission? *i.e. their ability to generate knowledge that is recognised and valued by science, civil society, government and the private sector.*



Methodology

- Single case study of Deltares. A Dutch RTO in the field of water and subsurface - 'Enabling Delta Life'
- Illustrative case study to explore the different aspects of internationalisation
 - Share of turnover from international activities grew from 16% in 2010 to 30% in 2016. Ambition to grow up to 40%.
- Desk research and 16 in-depth interviews with project managers and Deltares management
- Findings were verified by discussing results with two other RTO's and two Dutch engineering consultancies who regularly cross paths with Deltares abroad.



How do activities come about?

- Variety of approaches, both 'top-down' and 'bottom-up', usually a combination of both
- RTO's increasingly try to control and steer the different bottom-up activities of employees
 - Impose checks and balances
 - Roadmaps and targeted acquisition
 - Regional managers for coordination
- Take overs of foreign organisations or setting up research facilities abroad – strategies common in the private sector – are not actively pursued

What are the underlying motives?

- Turnover
- Developing new knowledge
- Obtaining critical mass
- Reputation
- Impact

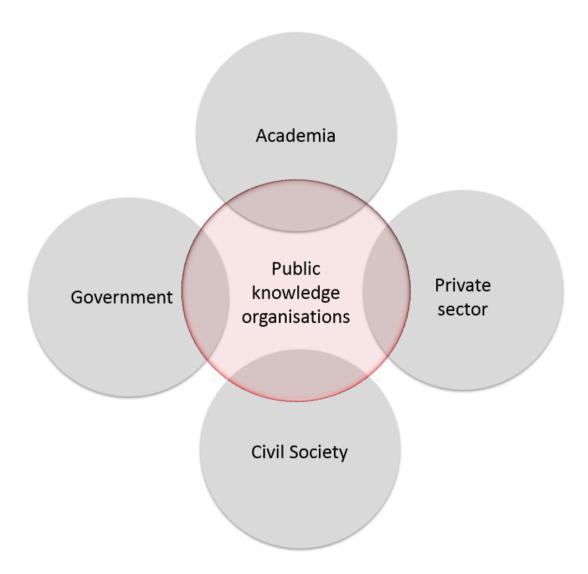
A typology of international activities

Type of activity	Typical projects	Characteristics
pre-competitive partnerships	European Framework Programmes Strategic partnerships with foreign knowledge institutes International public-private partnerships	 Focus on knoweldge development Room for strategic choices Required to bring in own funds
International contract research	 Commissioned by: Foreign governments Foreign companies International organisations Dutch government 	 Focus on applying knowledge Less room for strategic choices No own funds required

How do international activities contribute to their public mission: the ability to produce knowledge that is relevant and recognised in all four domains?

- Academia: Partnering with foreign knowledge institutions and participating in international research consortia allows RTOs to connect and contribute to global research practices
- Private sector: Teaming up with domestic firms abroad as a knowledge partner in global innovation systems
- Government: Obtaining critical mass in knowledge and expertise on public policy topics (without the costs)
- **Civil society**: Contributing to solutions for (often global) societal challenges. Impact potentially bigger abroad.

Finding a balance, also abroad



How government policies are shaping international activities

Within the Netherlands

- Government contributes €356,4 million of strategic funding to six RTOs to fulfil their public mission
- Code of conduct to prevent unfair competition with the private sector

Abroad

- Strategic funding cannot be spent abroad
- No code of conduct abroad: free to compete on international markets for contract research
- Main instrument to steer international activity is through STIdiplomacy
 - Focused on economic cooperation in western and BRIC countries

Finding a balance abroad

- The current policy environment mainly supports activities that increase the national competitiveness and the innovative capacity of the Netherlands
 - Happy to let RTOs do contract research abroad
 - Stimulate them to involve the Dutch private sector
- Limited vision on how activities might benefit other domains
 - Assume that a stronger RTO will be beneficial for The Netherlands
 - Assume that it will automatically also address societal challenges
- The only exception is the EU framework programme
 - Allow RTO's to use strategic funding for matching purposes

Finding a balance abroad

- Positive effects for public policy and civil society are a 'bycatch'
- Dangers of academic or corporate drift
 - RTOs are not on earth to perform European research projects
 - Nor are they here to perform consultancy work for foreign governments and companies
- RTO's should be able to convert this 'bycatch' for public policy and civil society into targeted ambition.
- A more holistic vision on the role of RTOs abroad is desirable

Policy recommendations

The responsible ministries could take a more explicit stance about the desirability to also contribute to international policy issues and societal challenges

 This asks for a better dialogue – not between the different RTOs, but between the responsible ministries and the RTOs

And think of ways to facilitate this

- Allow them to fund strategic research or partnerships on important policy issues, even though they take place abroad
- Give RTOs a more explicit societal mission abroad, for instance by connecting them to the SDG's
- Develop different types of STI diplomacy instruments



Discussion

- Currently, RTOs are defined as national organisations, aimed at national policy issues and economic interests
- But how to define the national interest in an increasingly globalised world? How 'direct' should this national interest be? And at which timeline?
- Towards European RTO's?
 - Is more cooperation between or mergers of different European RTO's desirable?
 - Should European tender rules also apply for R&D-related tenders?
 - Should we say goodbye to RTOs as national treasures?

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Government policy on Dutch RTOs

'Vision on RTOs' (ministry of economic affairs, 2013)

- Supporting governmental tasks and policy
- Develop, use and disseminate knowledge for the purpose of addressing societal challenges
- Strengthen the competitive position and innovativeness of the Netherlands
- Manage strategic research facilities and infrastructures

Government contribution: 253 million euro's

Code of conduct: prevent unfair competition with the private sector

