

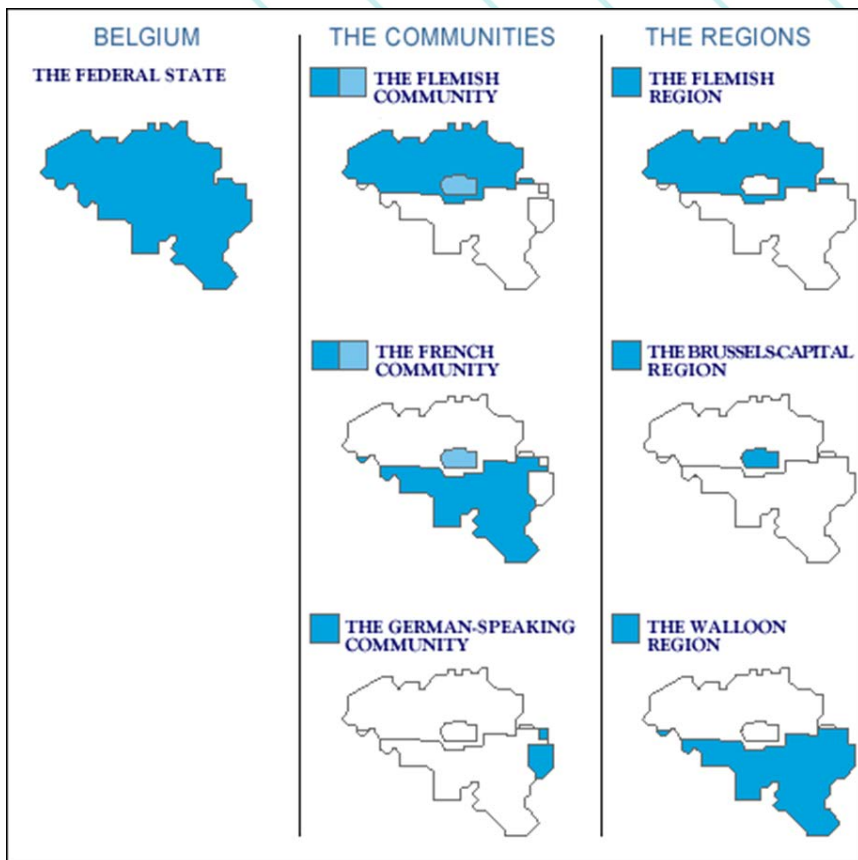


Opening new horizons

The Challenges of Peer Review in a Small Region

29 June 2017

Belgian Science and Innovation Policy



Primary responsibility of Communities/Regions

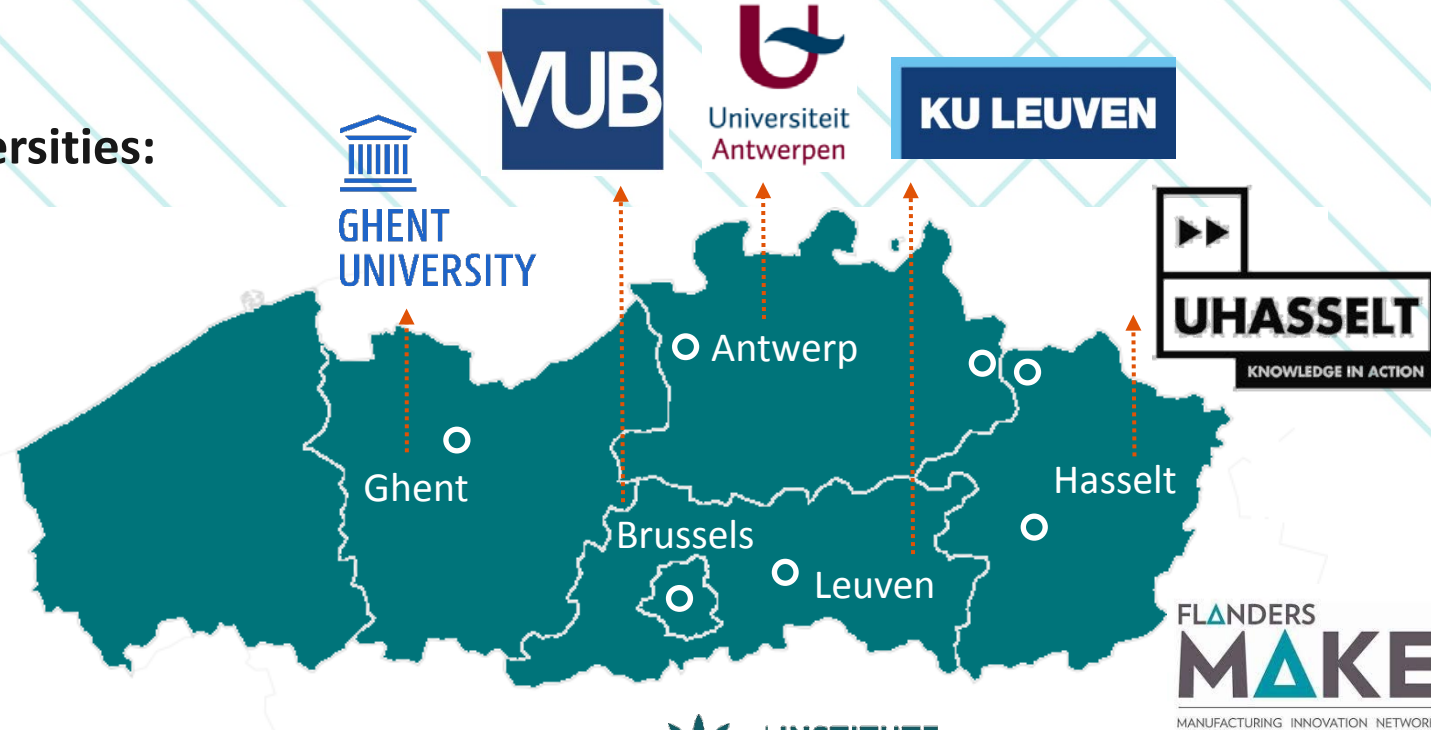
Communities: Education and basic research

Regions: Economy and applied research

Federal: Thematic programs including marine, space, and polar research (e.g. Station on Antarctica), federal scientific institutions

Main Research Performing Centers

World-Class Universities:



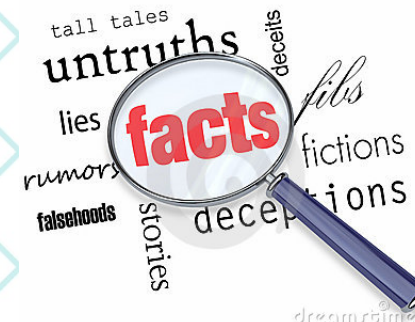
Leading (Strategic) Research Centers:



Facts about Flanders

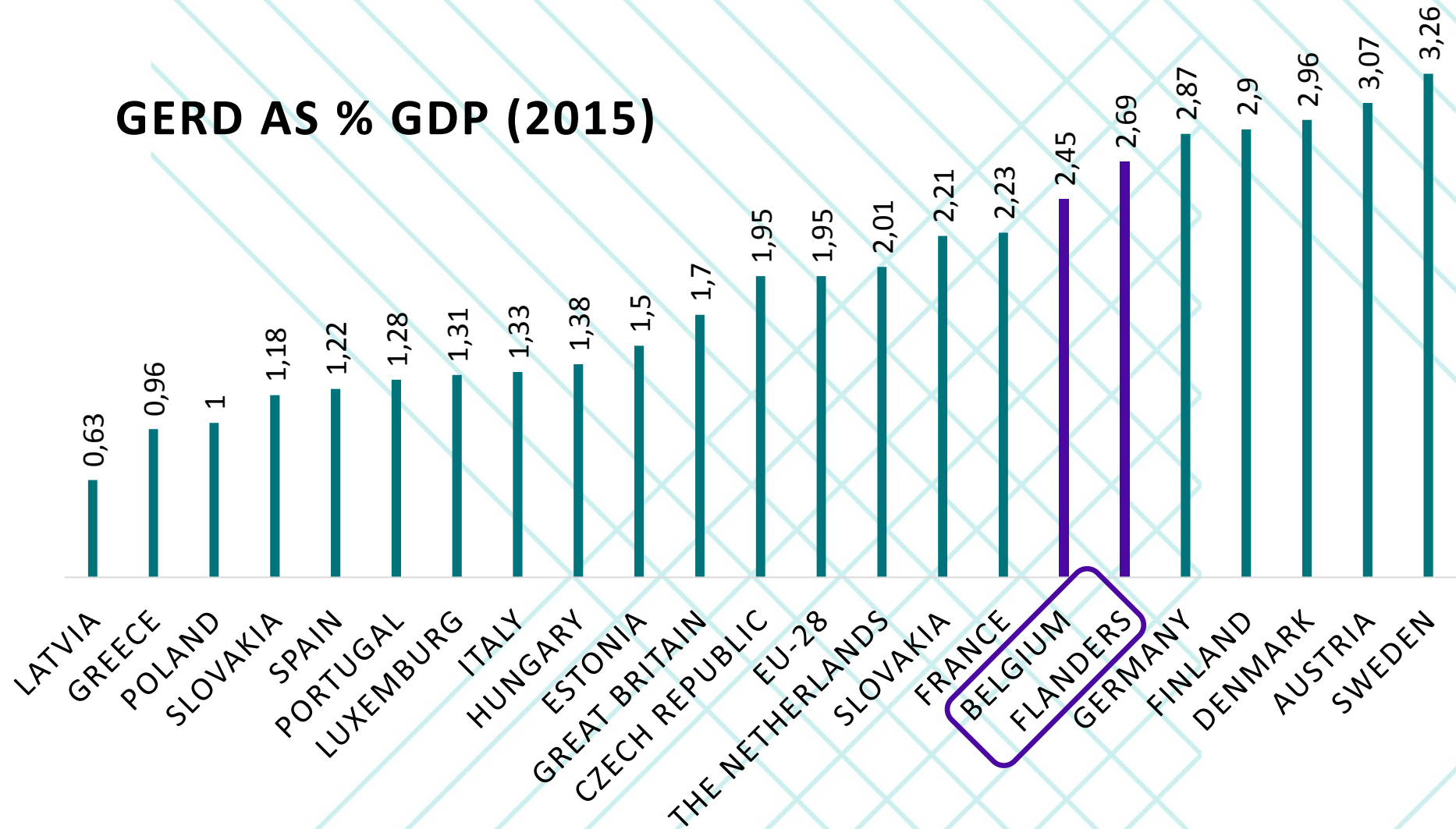
- Population: ca. 6.478.00 (2016)
- R&D-investments: $\pm 2,69$ % GDP (Flemish Region - 2015) $\pm 2,74$ % GDP (Flemish Community – 2015)
- Number of R&D personnel: ± 44.000 (or 0,69% population – 1,48% working force) (2014)
- Number of scientific papers: $\pm 1\%$ world (2013), or 24,3/10.000 inhabitants (2014)
- Number of EPO-patent applications (2012): 225,3/million inhabitants

Vlaanderen in cijfers 2016 – Studiedienst Vlaamse regering, p 4.
STI in Flanders, Policy & Key Figures – EWI 2016, p70, 90-91, 100, 104.
Totale O&O-intensiteit in Vlaanderen 2005-2015 “3% nota”, p.8.



3% Norm

GERD AS % GDP (2015)



Totale O&O-intensiteit in Vlaanderen 2005-2015 "3% nota", p.8-9.
OECD, Main Science and Technology Indicators, 2017/2.

Publication - EPO Patent Output

Figure 30: International comparison of the publication output per 10,000 inhabitants (2014)

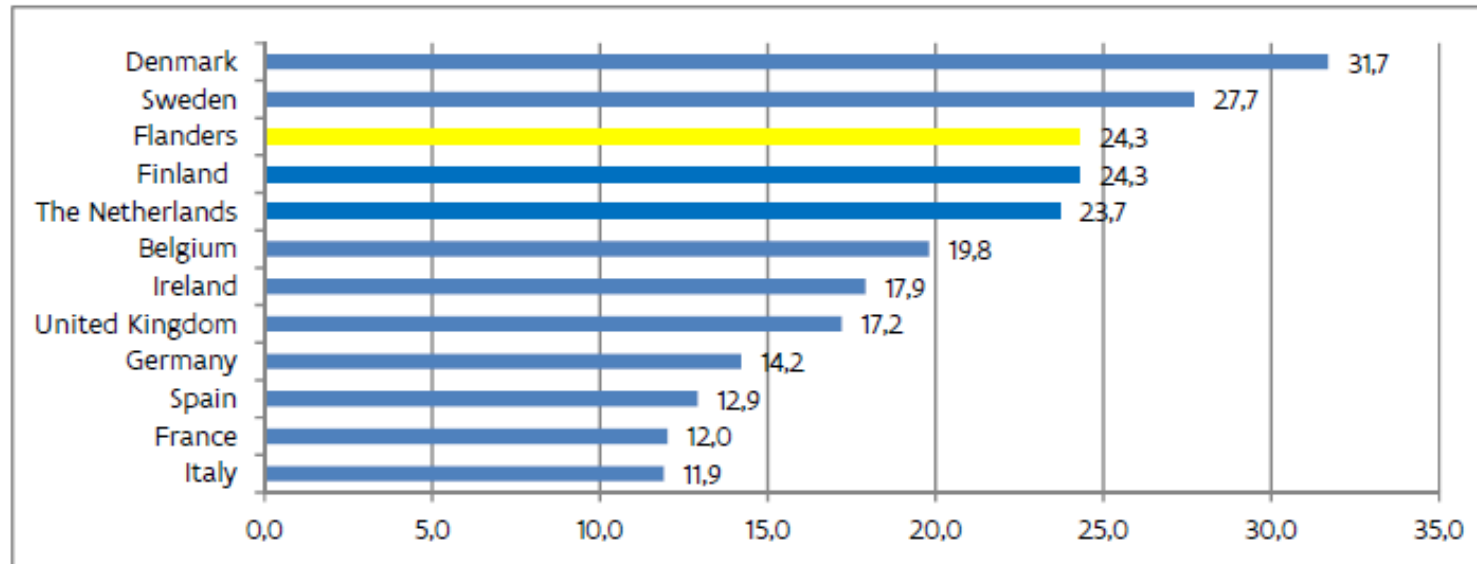
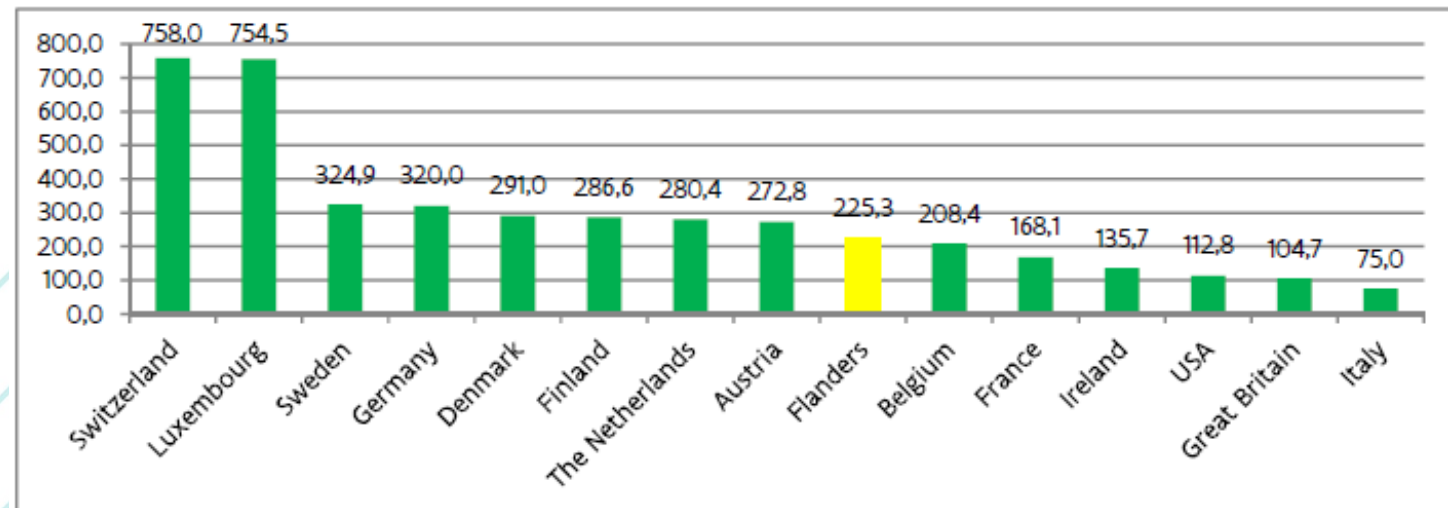


Figure 34: International comparison of EPO patent applications per million of population by origin, inventor and/or applicant (2012)



STI in Flanders, Policy & Key
Figures – EWI 2016, p100, 104.



Research Foundation – Flanders (FWO)

www.fwo.be

FWO: Main Mission

- To select to most excellent researchers performing research at a Flemish host institution
- To do this in a researcher friendly way
- Based on transparent and efficient processes and procedures
- Based on international *best practices*.
- Optimizing the growing pressure of the number of applications



HR EXCELLENCE IN RESEARCH

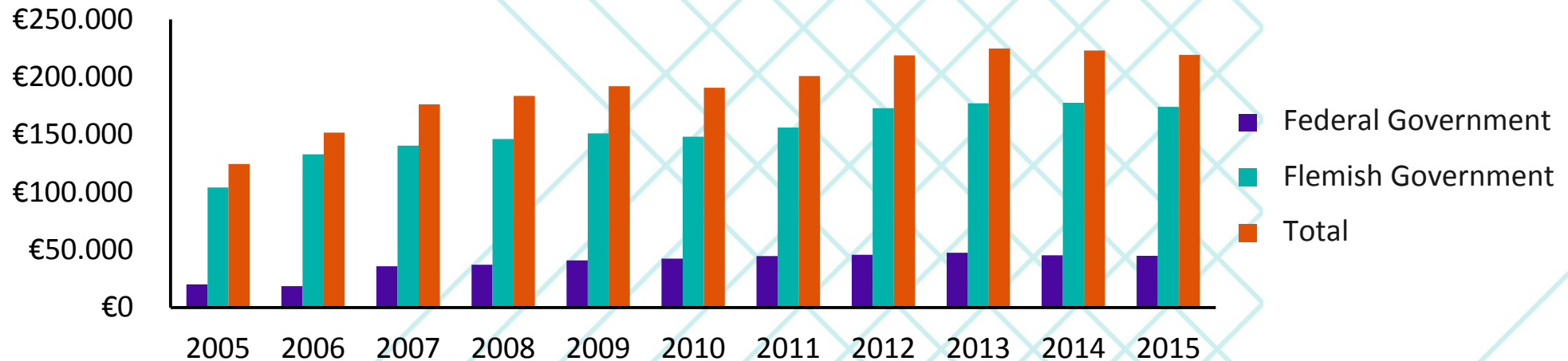
FWO Budget

Budget 2016: 321,6 million EUR

Budget 2017: 340,7 million EUR (overhead 3,4%: 64 FTE => 12 PhD)

Number of applications: > 6.000/year

2005-2015
(in thousand EUR)



Main FWO Funding Schemes

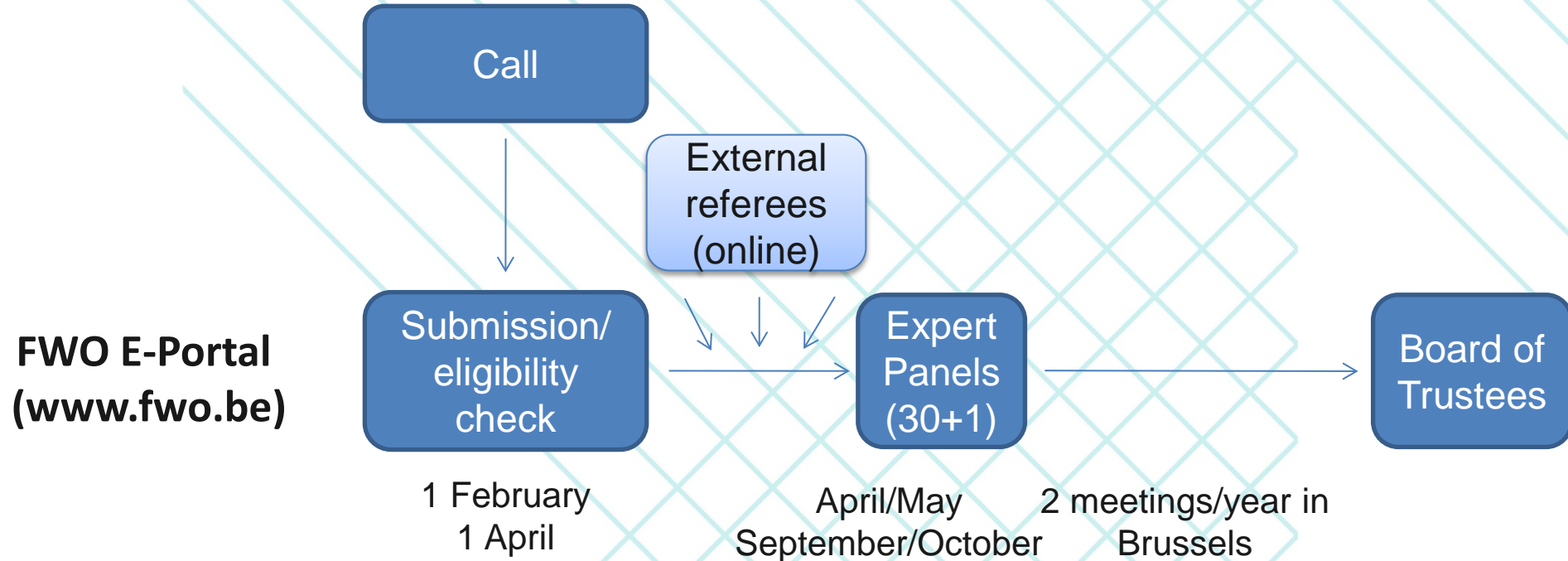
Master	Fellowships		
	International Mobility		
	Research Grants		
	Research Projects		
PhD			
Postdoc			
Established researcher			

Increasing Number of Applications

		2005	2009	2016
PhD-mandates	#	535	826	983
	Δ		+54%	+84%
PostDoc-mandates	#	427	599	672
	Δ		+40%	+57%
Projects	#	681	750	1.305
	Δ		+10%	+92%

- PhD applications: **+84%** since 2005
- PostDoc applications: **+57%** since 2005
- Project applications: **+92%** since 2005

The Application/Evaluation Process



Duration workflow fellowships: < 5 months
Duration workflow projects: < 7 months

How to deal with the large number of applications?

- Adapted to the program:
 - PhD-fellowships: only evaluated by evaluation panels
 - Postdoctoral fellows: remote referees + evaluation panels
 - Research projects: remote referees + evaluation panels
- Limitation of the influx of new applications:
 - Max. 2 attempts for a pre-doctoral/postdoctoral fellowships (across all programs)
 - Strict limitation of the years after master/PhD and years of seniority to be eligible
 - Max. 2 ongoing projects
 - Strict regulations concerning eligibility of applicants for projects

How to deal with the large number of applications?

- Reorganisation of the evaluation process:
 - 2-step procedure for fellowships
 - Online discussion forum to select proposals for step 2
 - Same deadline for different programs
 - Split of the existing expert panels
- More focused programs:
 - Junior/senior projects
 - Junior/senior postdoctoral fellowships

External Peer Review at FWO (Current Situation)

- Small region/small council
 - Col is everywhere:
 - Remote referees: only outside Belgium
 - Not enough staff capacity to look for remote referees by the council:
 - Applicants need to suggest at least 10 possible referees
 - Strict Col-rules (no co-authors in last 3 years, no joint projects in last 3 years, no other collaboration, etc.)
 - **Check by FWO:**
 - FWO administration will see to it that applicants strictly observe the eligibility regulations and other guidelines
 - When a violation is detected => application is ineligible

External Peer Review at FWO (New Situation)

- Small region/small council
 - Col is everywhere:
 - Remote referees: only outside Belgium
 - Not enough staff capacity to look for remote referees by the council:
 - Partly “outsourcing” this task (e.g. former ESF, etc.) through European tender
- Expert panels
 - Majority from outside Flanders
 - Chair/Vice-chair: from outside Flanders