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The Italian Quality Evaluation System, VQR

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What is VQR

The Research Quality Assessment (VQR) is a periodic assessment exercise carried out by the National Agency for Evaluation of the University System and Research (ANVUR).

The VQR produces a summary judgment on the research activity of the universities and Research Institutes

The results are used by the Ministry to decide the allocation of a major share of ordinary funding. As a matter of fact, one part of the funding coming from the Ministry is based on the performance of the Universities (€ 1.4 billion in 2015) and 65% of this amount is distributed on the basis of the results of VQR



Evaluation of Research Quality



Valutazione Qualità della Ricerca

National Agency for the Evaluation of Universities and Research Institutes



Agenzia Nazionale di Valutazione del sistema Universitario e della Ricerca



VQR: a brief history

1998 The CIVR (Committee for the Orientation of the Evaluation of the Research) was established under the Ministry of University and Research <http://civr.miur.it/normativa.html>

2001-2003 The first national research evaluation (VTR, Three-Year Research Evaluation) was conducted by CIVR, with the output of the final report in February 2007

2006 With the law n. 286 (Nov 24) the National Agency for the Evaluation of the University and Research system (ANVUR) is established

2010 Two Presidential Decrees (Feb 1, Feb 22) state the rules and procedures for ANVUR, the Governing Board and appoint its members. ANVUR replaces the CIVR

Once established, ANVUR had to complete the operational programmes undertaken by CIVR, which ceased to exist and was replaced by the new agency.



VQR: a brief history

2011 The 15 July 2011 Ministerial Decree entrusted ANVUR with the execution of the Quality Research Evaluation for seven years, from **2004 to 2010** (VQR1)

At the end of July, ANVUR published a draft of the VQR1 Call on its website, and invited the universities and research Institutes to post comments, additions and proposals for amendments.

November 2011 The final version of the VQR1 Call was approved by the ANVUR Governing Board.

7 November 2011 VQR1 officially started with the output of the VQR1 Call on the agency's website



VQR: a brief history

2013 VQR1 completed: ANVUR issued the Final Report and the 14 area reports

2015 The second Evaluation of Research Quality (VQR2) for the time span **2011-2014** was started with the output of the Ministerial Decree dated 27 June 2015

8 July 2015: output of the provisional call on the ANVUR site on. Again, ANVUR asked to universities and research Institute to examine it by posting comments, additions and proposals for amendments.

30 July 2015: final version of the VQR2 Call published on the ANVUR site

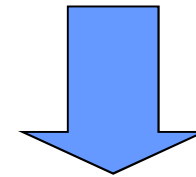
2017 VQR2 completed: ANVUR issued the Final Report and the 16 area reports



VQR1 2004-2010 : some numbers

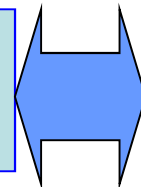
133 Institutions evaluated:
95 universities
21 Research Institutes
17 Inter-Universitary Associations

450 scholars appointed



14 Research Areas
(scientific / humanistic)

14 Groups of Evaluation
Experts (GEV)



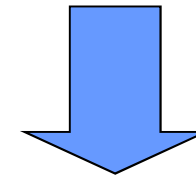
180 000 products of research



VQR2 2011-2014: some numbers

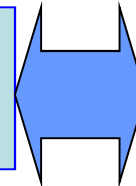
134 Institutions evaluated:
96 Universities
18 Research Institutes
20 Inter-Universitary Associations

400 scholars appointed



16 Research Areas
(scientific / humanistic)

16 Groups of Evaluation
Experts (GEV)



115 000 products of research



VQR: what is evaluated

For each institution and department

- a) quality of the research products, divided per areas, i.e.
percentual distribution of the research products in 5 classes
- b) the same as in (a) but restricted to the staff members who have been hired by the Institution or have had a promotion in the three years
- c) competitiveness:
For Universities, ability to attract funding from national and international Projects + characteristics of the PhD schools.

For Research Institutes, ability to attract funding from national and international Projects, PhD positions in collaboration with Universities.



VQR: how it works

The areas

Area	Descrizione
Area 1	Scienze matematiche e informatiche
Area 2	Scienze fisiche
Area 3	Scienze chimiche
Area 4	Scienze della terra
Area 5	Scienze biologiche
Area 6	Scienze mediche
Area 7	Scienze agrarie e veterinarie
Area 8a	Architettura
Area 8b	Ingegneria civile
Area 9	Ingegneria industriale e dell'informazione
Area 10	Scienze dell'antichità, filologico-letterarie e storico-artistiche
Area 11a	Scienze storiche, filosofiche e pedagogiche
Area 11b	Scienze psicologiche
Area 12	Scienze giuridiche
Area 13	Scienze economiche e statistiche
Area 14	Scienze politiche e sociali



VQR: how it works

The Groups of Evaluation Experts (GEV):

Scholars of high qualifications chosen on the basis of international experience in:

- 1) research
- 2) research evaluation experiences already completed.

selected among those who answered a specific call issued by the Board itself.



Area	Numerosità GEV
Area 1	22
Area 2	33
Area 3	22
Area 4	15
Area 5	33
Area 6	58
Area 7	20
Area 8a	14
Area 8b	9
Area 9	33
Area 10	36
Area 11a	25
Area 11b	6
Area 12	32
Area 13	31
Area 14	11



VQR: how it works

The Products of the Research:

1. Scientific monography (books etc)
2. Papers in scientific journals (articles, letters, reviews)
3. Contributions to a volume (conference proceedings with peer review, chapters, essays...)
4. Exhibitions, artworks, architectural projects, etc
5. Patents



VQR: how it works

The Products of the Research:

2 products for each staff member of Universities with a permanent position (Professor, Associate Professor, Assistant Professor)

3 products for each staff member of Research Institutes with a permanent position

(reductions for people not in service during the whole period or for special charges like Head of Departments etc)



VQR: how it works

The Products of the Research:

For each staff member, the products were selected by the Institution among a list suggested by the person

Most Universities set up a “simulation” tool to allow the staff choose the best products according to the guidelines of each GEV

Products with several authors can only be submitted ONCE per Institution

In VQR1 they could be submitted only once: no repetition at all

In VQR2 they could be submitted several times by different institutions
ex. Papers from the CERN collaborations!



VQR: how it works

The evaluation:

Each GEV declares the criteria for the evaluation

The criteria have changed from VQR1 to VQR2!

The evaluation of a product is made by using (together or alternatively):

- direct evaluation (e.g. using bibliometric data)
- peer review (by experts chosen by the GEV)

(50% + 1 of the products of each GEV had to be evaluated by peer review)



VQR: how it works

The evaluation:

For each product the following aspects are evaluated:

- **originality** (difference from previous approaches to the same subject)
- **scientific / methodological rigor** (clear goals, state of the art, attainment of the objectives)
- **impact (demonstrated or potential)** (how much it can have a theoretical/practical influence on the specific field of research)



VQR: how it works

The evaluation:

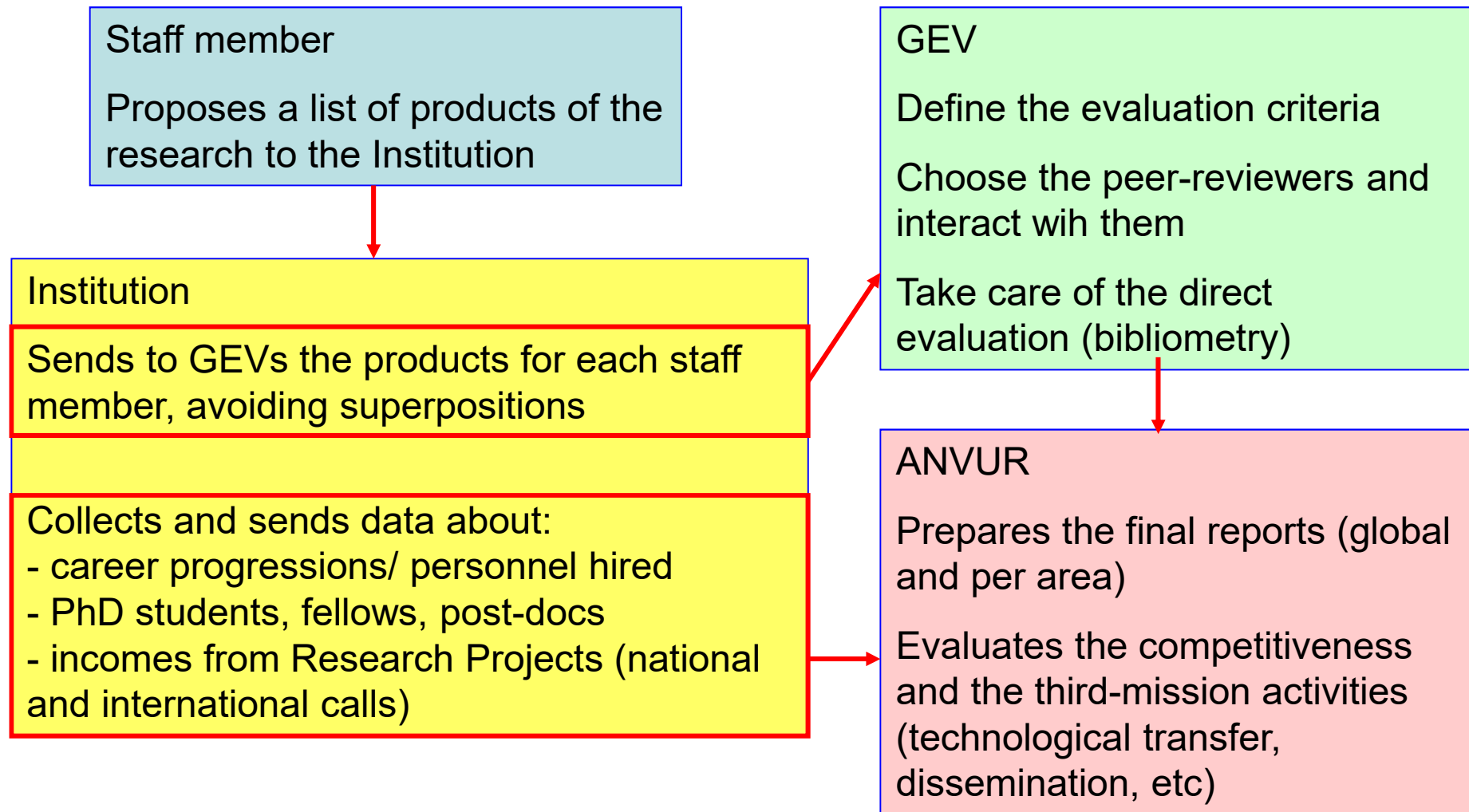
The quality of each product can thus be :

- excellent (score: 1 top 10%)
- high (score: 0.7 10-30%)
- fairly good (score: 0.4 30-50%)
- sufficient (score: 0.1 50-80%)
- limited (score: 0 80-100%)
- not evaluable (score: 0)

The products expected but not submitted by the Universities were considered “not evaluable”

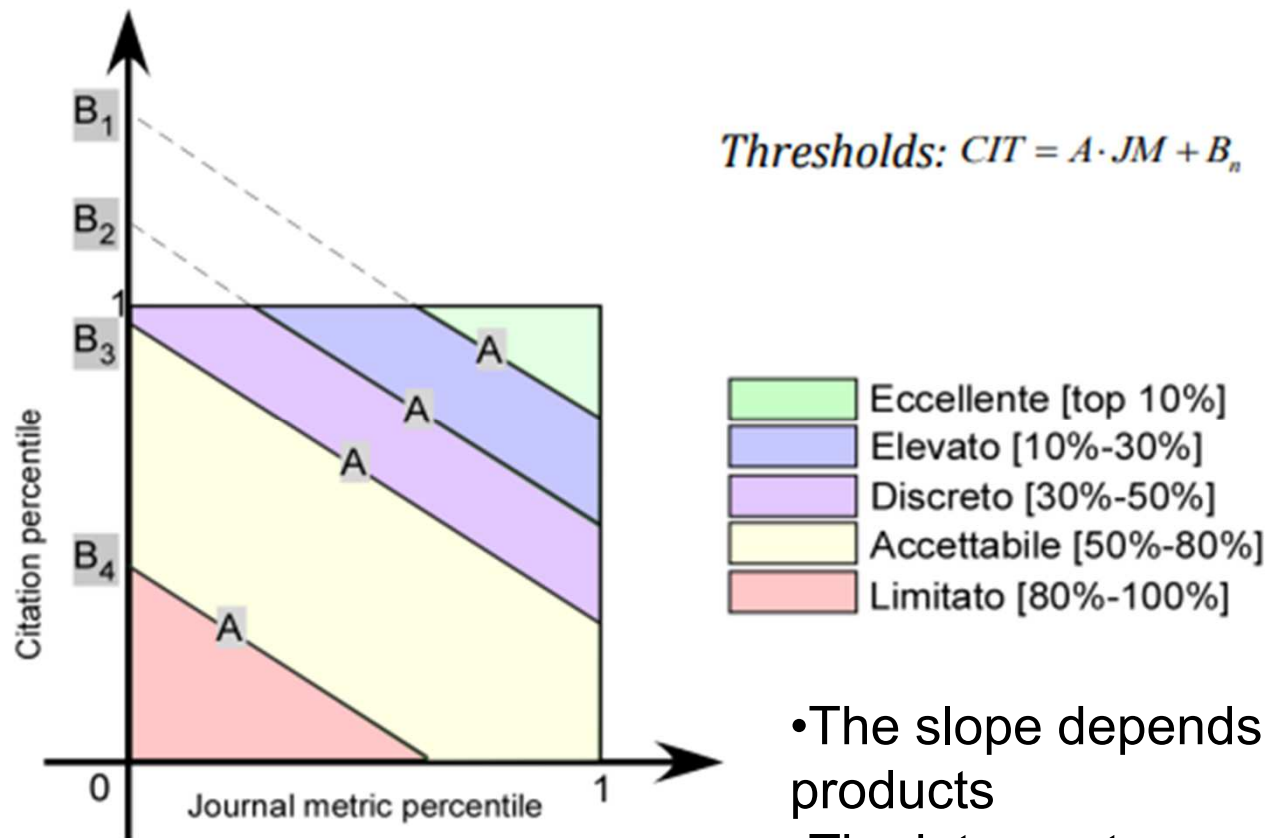


VQR: data flow





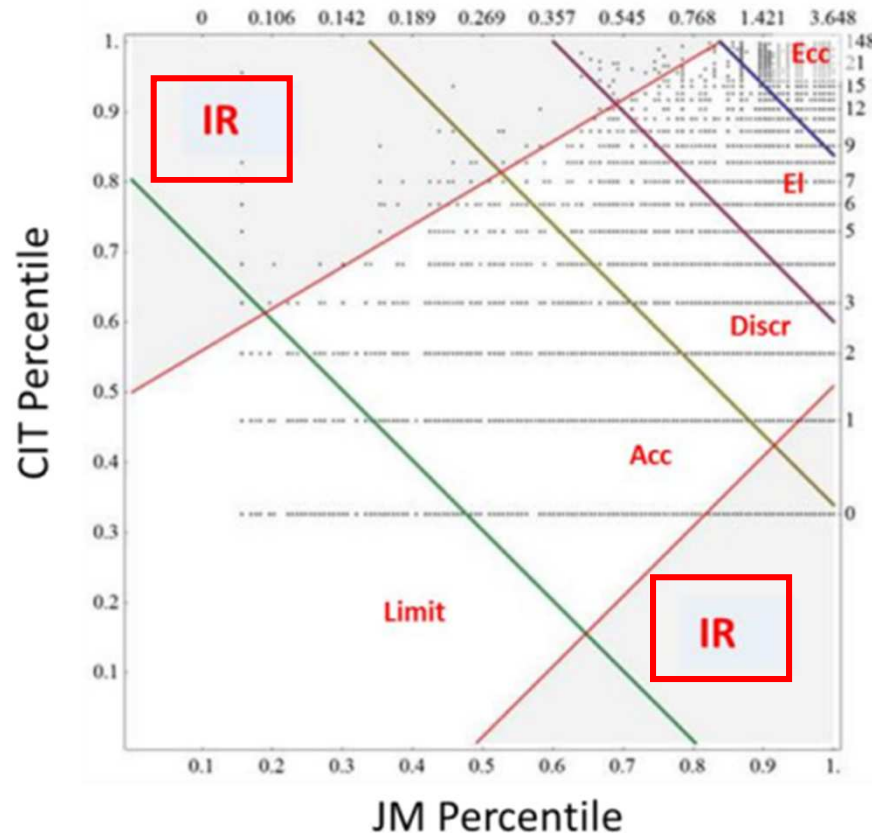
Example of the algorithm (area 02: Physics)



- The slope depends on the year of the products
- The intercepts were determined “a posteriori” so as to have 10% of excellent products



Example of the algorithm (area 02: Physics)



- The products with high IF and small number of citation or vice-versa were submitted to peer-review (IR areas)

- Only very rarely the indication of the Institution to peer-review a product not in these areas was accepted



The critical aspects

- 2 products in three years is judged not to be a significant sample of the researcher's activity
- Extremely complicated criteria and algorithms for the bibliometric ranking
- The rule of 10% excellent products was detrimental to areas that perform very well
- The evaluation did not have the same impact on different areas
- The evaluation of papers on multidisciplinary journals was unpredictable and methodologically wrong
- The VQR results were used to judge single persons, e.g. used as a threshold for the participation to PhD board (nonsense)...