

Gearing research councils towards funding of emerging science and technology

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'Tentative governance in emerging science and technology. Actor constellations,
institutional arrangements & strategies'

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The background of the slide is a grayscale microscopic image showing numerous overlapping circular structures with a textured, porous surface. These structures vary in size and are arranged in a somewhat random pattern, creating a complex, layered appearance. The lighting highlights the intricate details of the textures, giving a three-dimensional effect.

Research councils facing new science and technology

**The case of nanotechnology in Finland, the Netherlands,
Norway and Switzerland**

Frank van der Most

RCs are conservative

- ◆ Resource dependence theory
 - External effectiveness assessment \Rightarrow Resources (any kind)
 - Internal structure \Rightarrow environment enactment
- ◆ Web of dependencies
 - Embedded in (inter)national research and research policy landscape
- ◆ Fractioning in multiple dimensions:

Ministry for research and education

Research council

Ministry for trade and industry

Technology agency

Ministry for research and education

Research council

Discipline

A

Discipline

B

Discipline

C

Discipline

D

Ministry for trade and industry

Technology agency

Division

I

Division

II

Division

III

Division

IV

Ministry for research and education

Research council

Discipline

Discipline

Discipline

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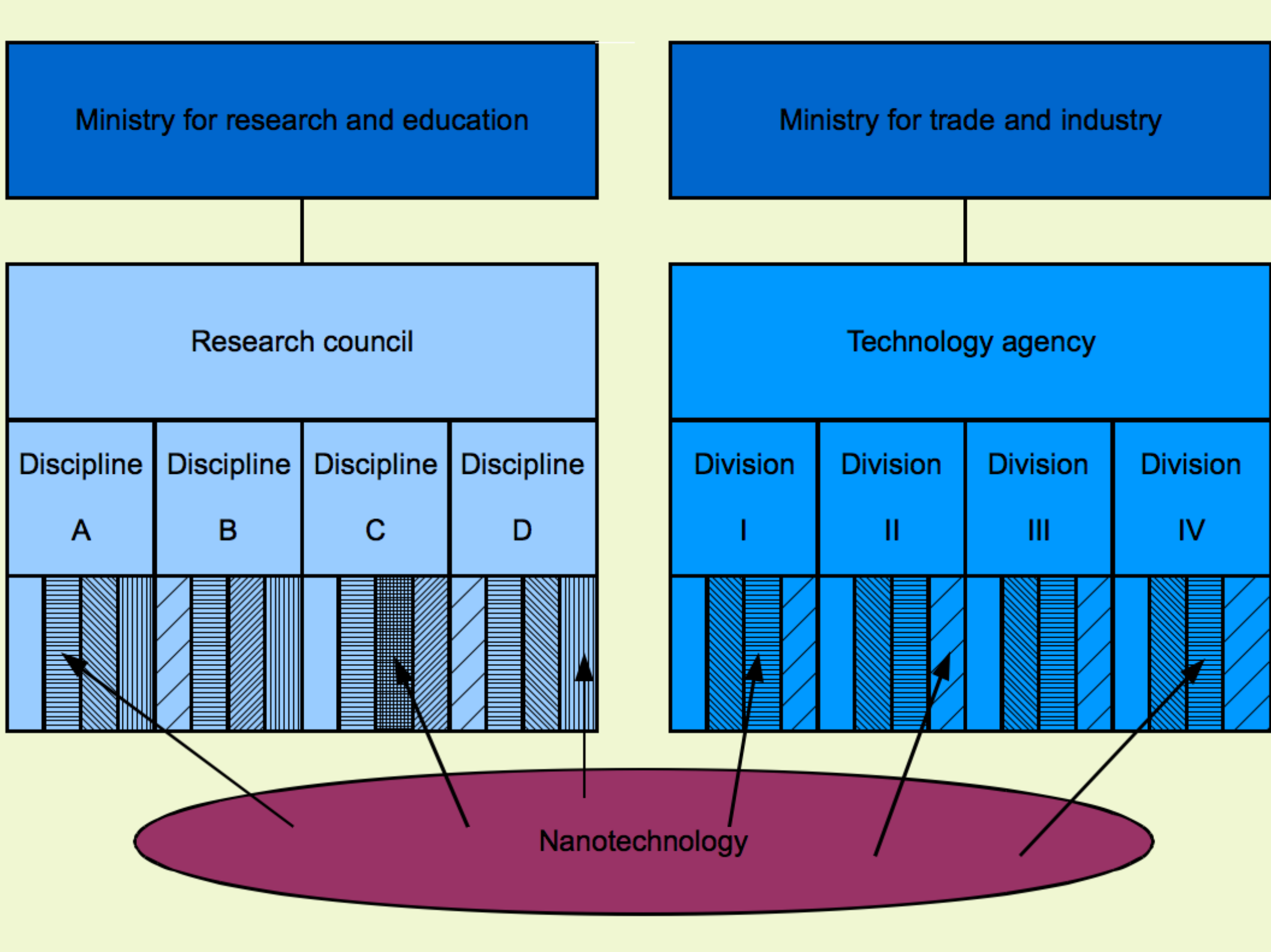
I

II

III

IV

Nanotechnology



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Nanotechnology

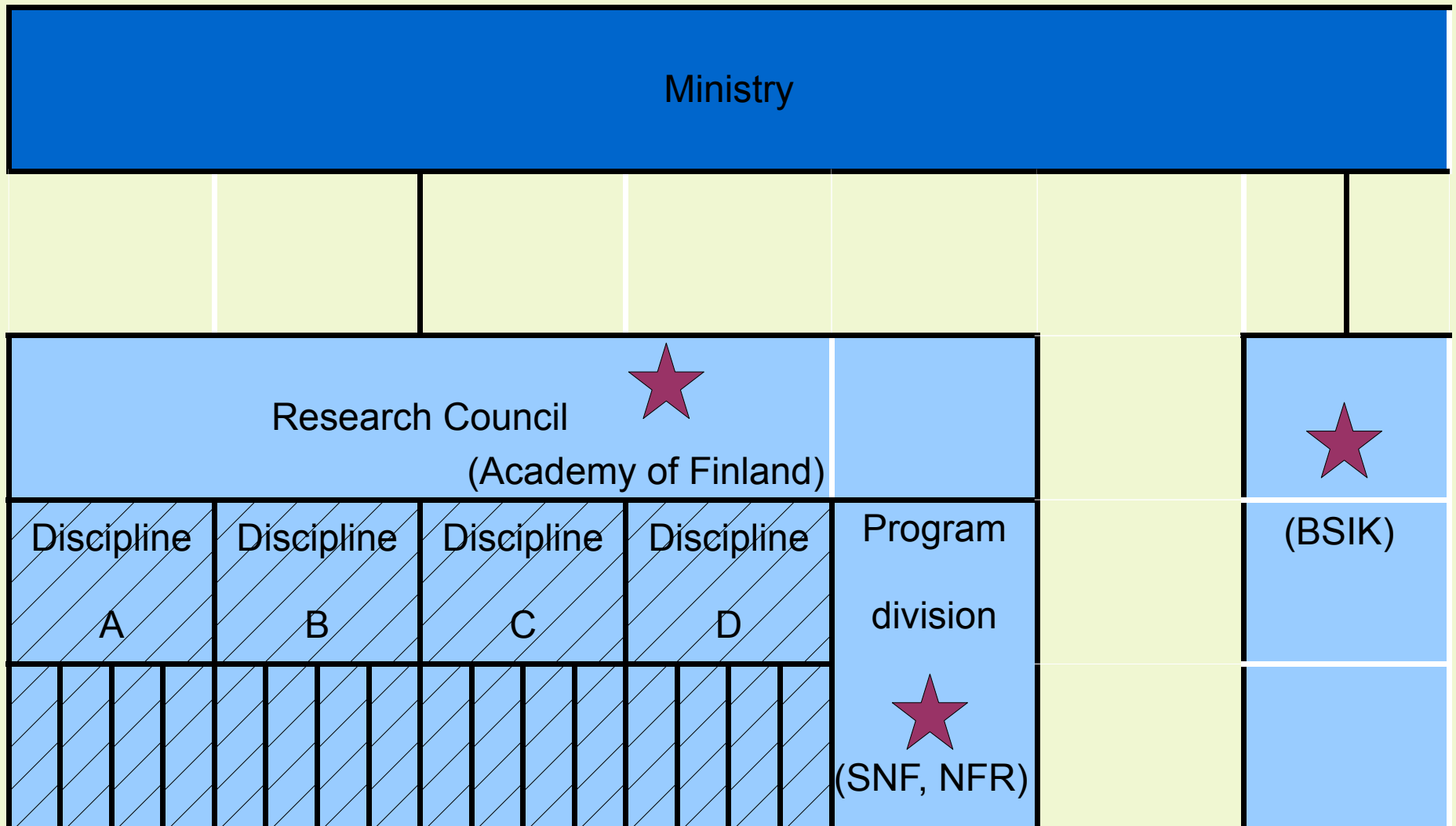
Small, but some room for maneuver

- ◆ **Web of resource dependencies offers some space**
- ◆ **Needs time to adjust**
 - **Fast big investments make little sense**
- ◆ **New fields start small**
- ◆ **Most will not grow into giants**

How to work around the limitations?

- ◆ **Some suggestions**
- ◆ **Not all 'invented', but existing**

1: Outside the disciplinary structure



2: Open towards needs

No predefined funding shape and conditions

3: Reconsider selection procedures

- ◆ Peer review \Leftrightarrow disciplinary,
i.e. established
divisions
- ◆ Societal review (SNF)

4: Identification of new fields

- ◆ RC in a good position as aggregation machines (Rip)
- ◆ They can be more active in stead of passive (NFR)
- ◆ Competition of aggregation 'Experts' ? (Tekes)

Will it work?

- ◆ Modest change - in terms of financial volume
- ◆ Other actors involved (universities, research institutes, private enterprise, ...)
- ◆ Other resource dependencies
- ◆ RC in good position

Thank you for your attention!

Questions?

Suggestions?

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