SEMANTIC APPROACHES TO DATA ANALYSIS

USING DATA FROM THE EC/OECD 2017 STIP SURVEY

USE CASE: KNOWLEDGE TRANSFER POLICIES

CSTP-TIP Workshop: Semantic Analysis for Innovation Policy
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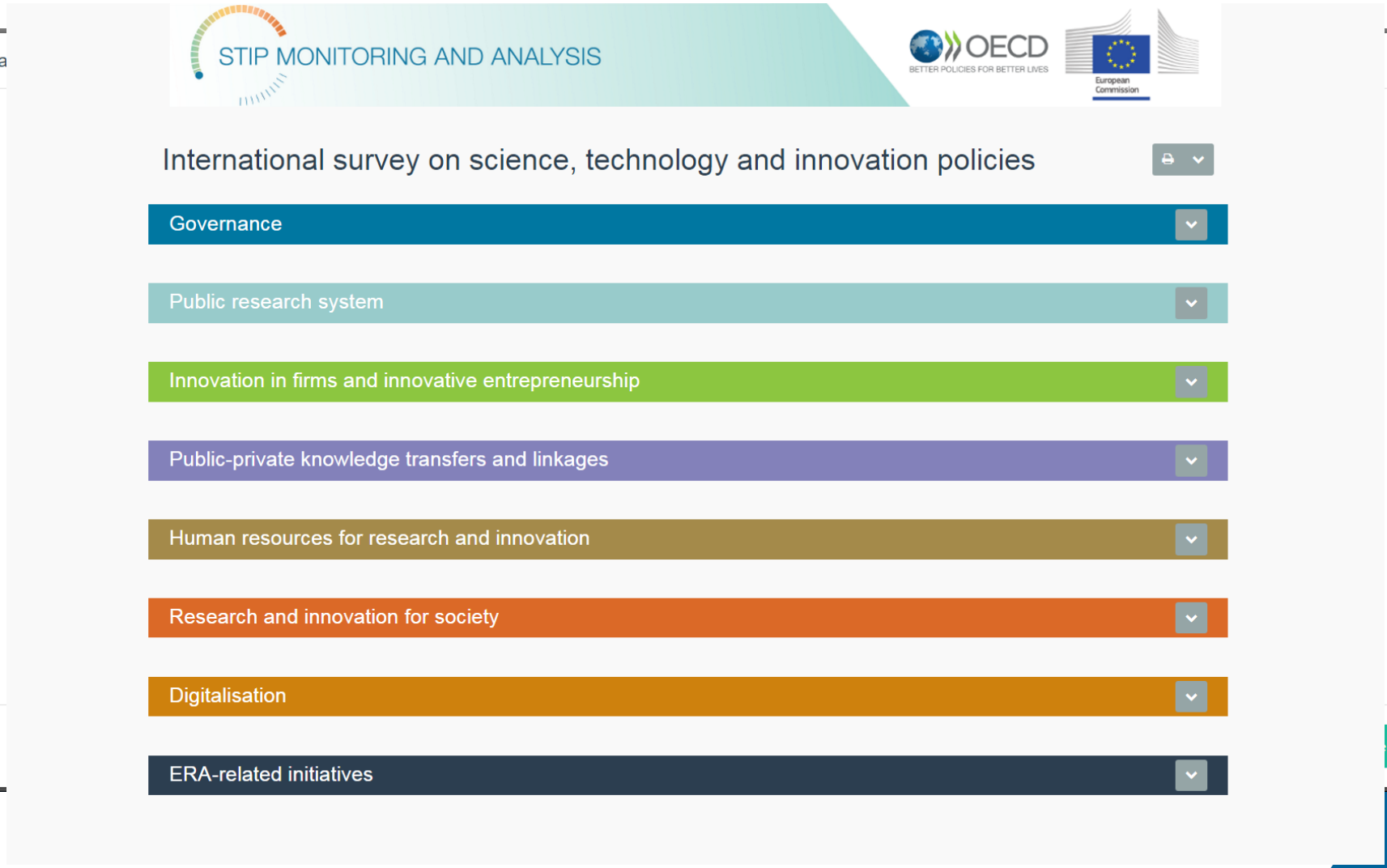
OECD
BETTER POLICIES FOR BETTER LIVES

Embedding taxonomies into the STI Policy Survey

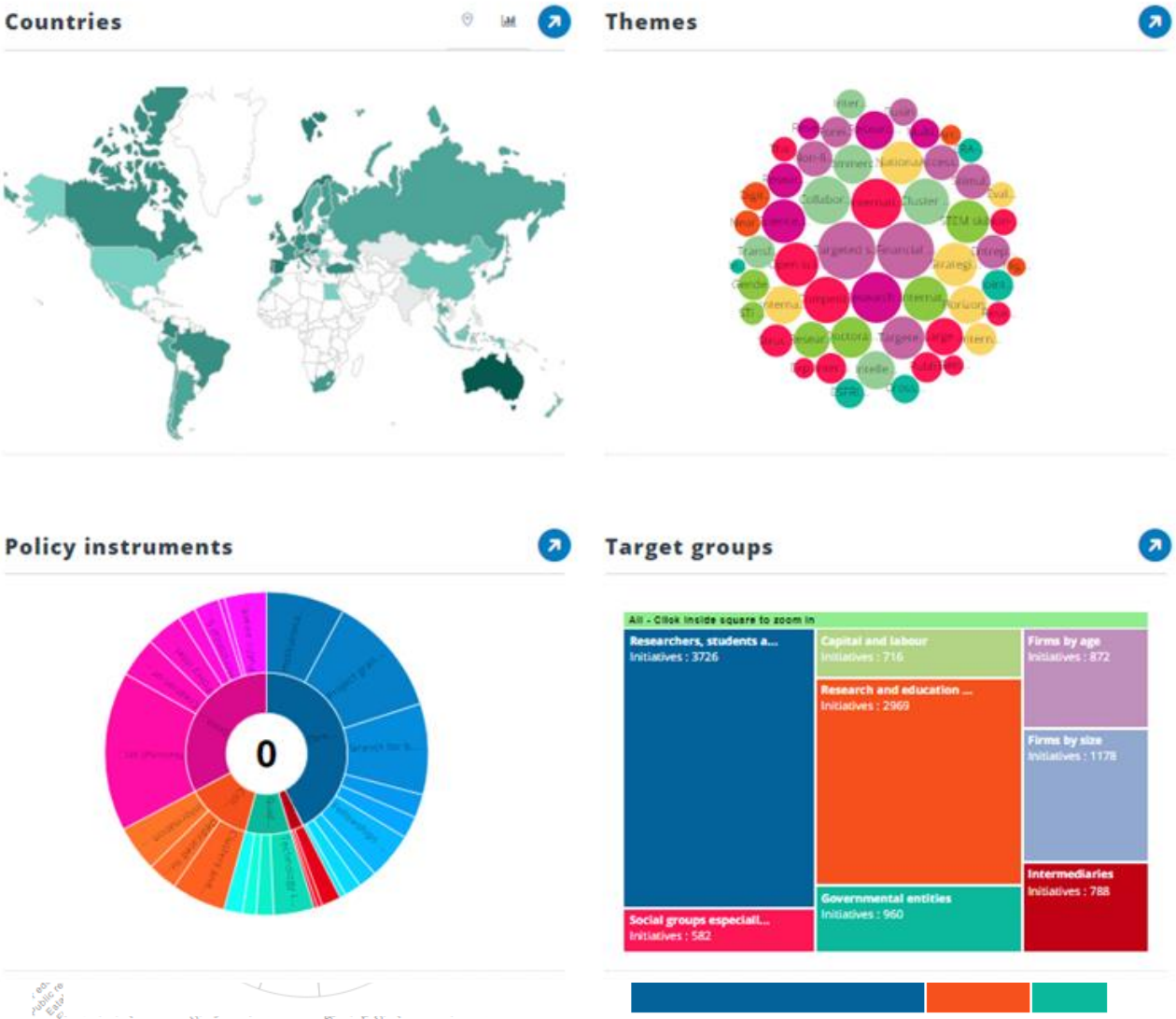
- We run an international survey on national STI policies **every two years**, jointly with the European Commission since 2015.
- In the 2017 edition, **data collection** is more firmly **structured** by **taxonomies**, making responses more **comparable** and **facilitating analysis**. These taxonomies are:
  - An **STI Policy Model** (theme taxonomy) that structures the issues (questions) covered by the Survey
  - A **policy initiative** taxonomy (survey response unit)
    - A **policy instrument** taxonomy (e.g. innovation vouchers)
    - Taxonomies for **target groups** and **budget ranges**
- We plan to continue developing these taxonomies, including external inputs from an **STIP Expert Group**

New online survey tool: Data collected following the taxonomies



Structured data → Semantic visualisation tools

Clu Commercialisation of public research results



Interfaces to **access** and **visualise** policy data now available at

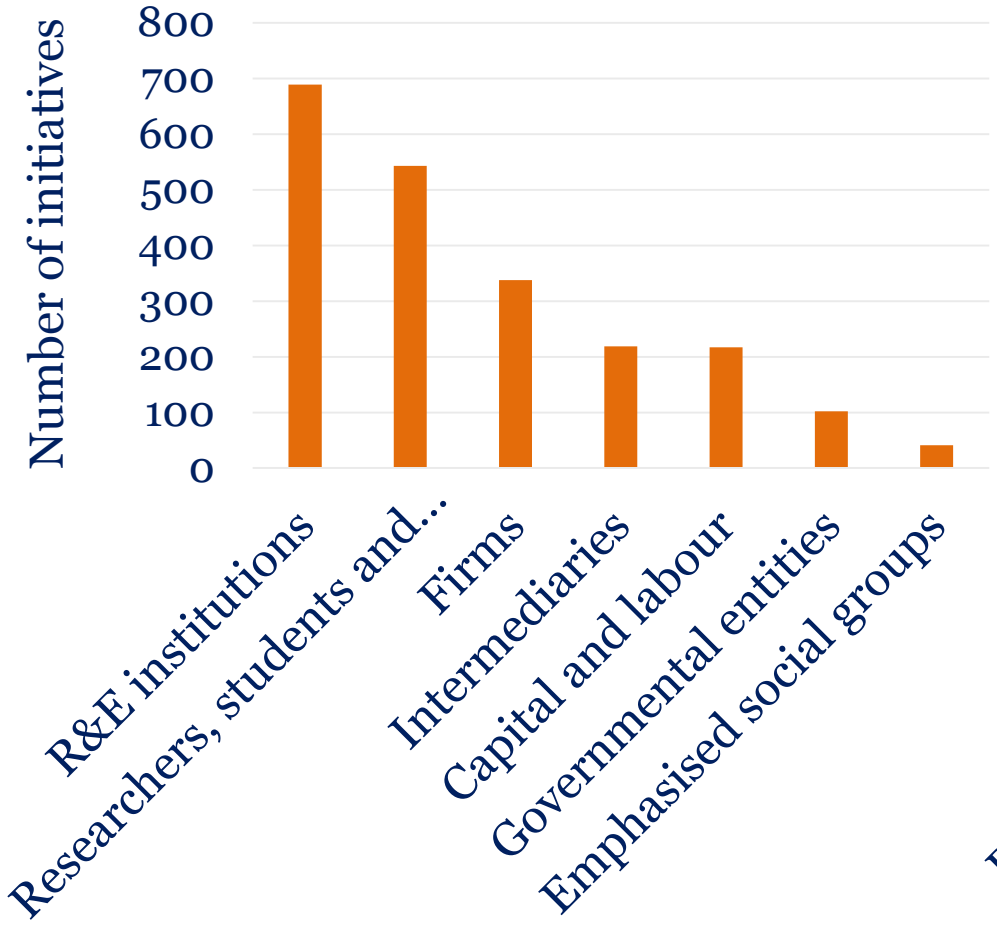
http://stip.oecd.org

Hands-on exercise on how to use them, with an emphasis on Knowledge Transfer after lunch !

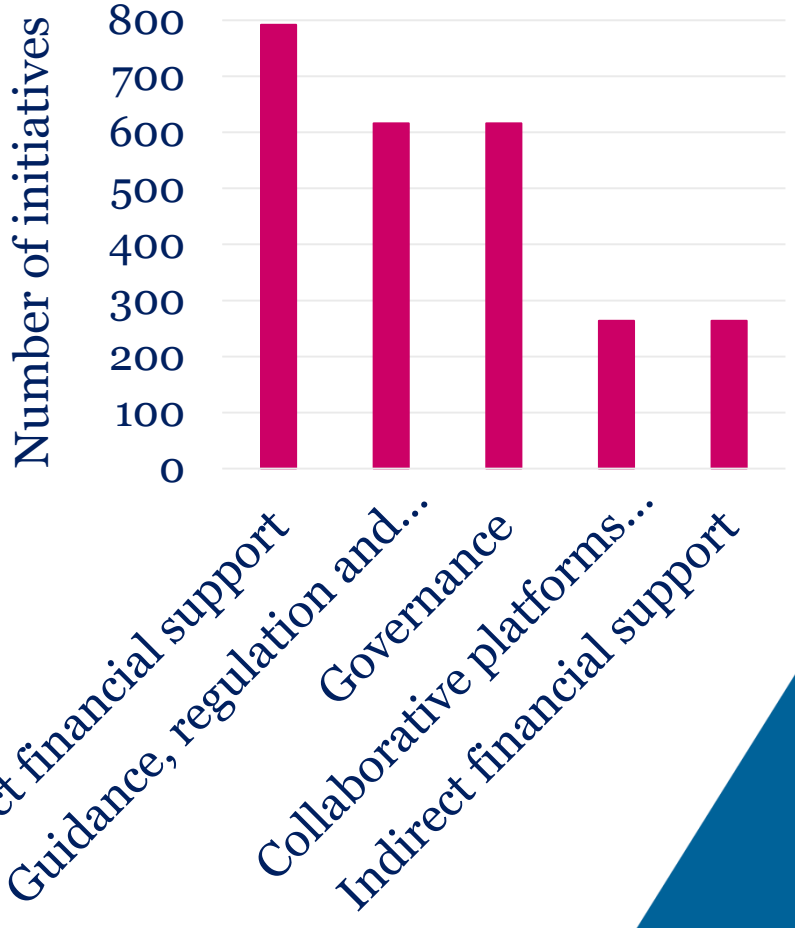
14h30 – 16h00
@ Room CC20

Knowledge Transfer policy area:
Target groups and policy instruments

Target groups



Policy instruments



Knowledge Transfer policy area:
Semantic analysis of policy objectives

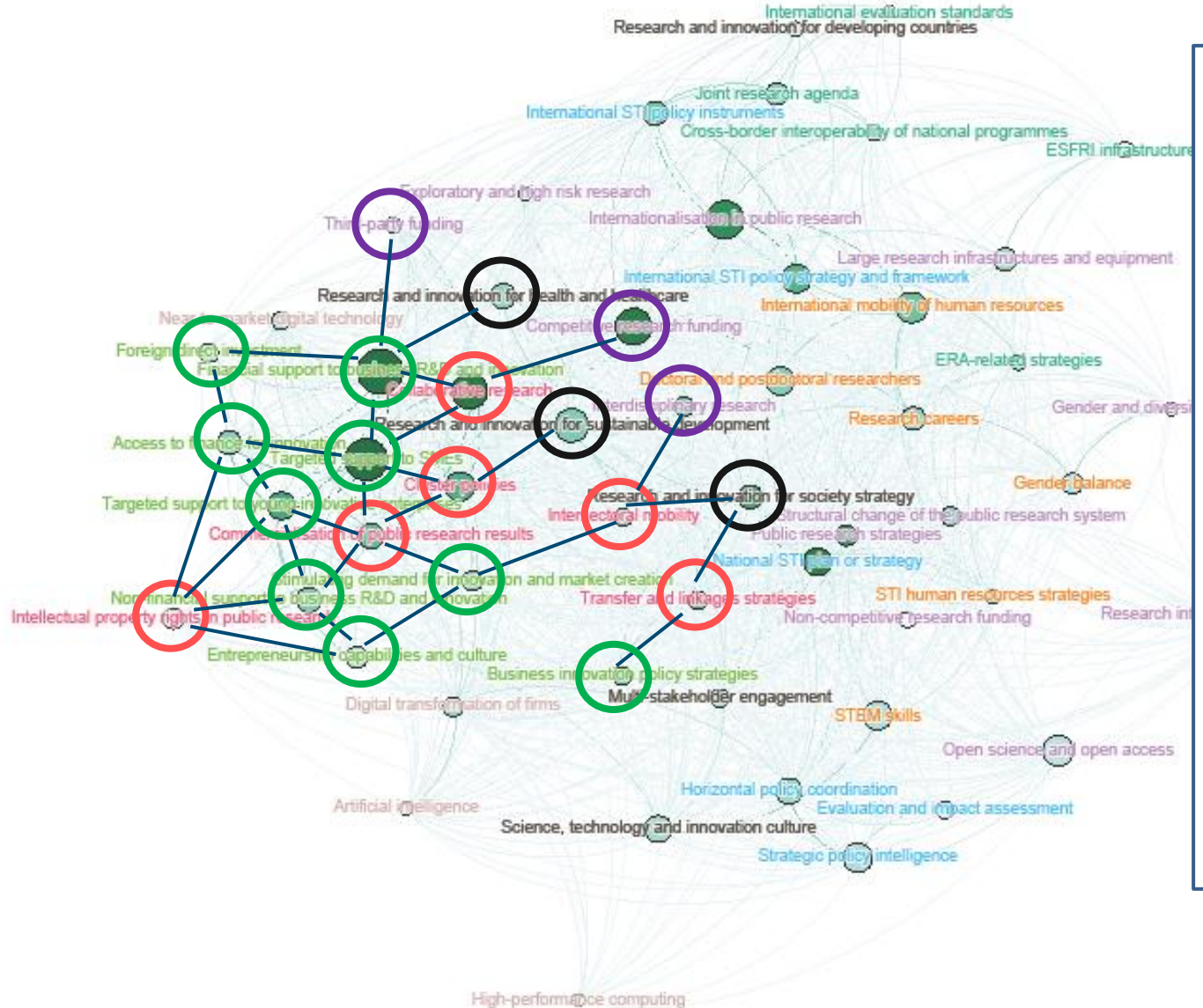
Network analysis

Consider that, in the survey response, any **policy initiative**:

- May be linked to more than one **theme**.
  - Example: **Competitive research funding** and **Collaborative research**.
- May use more than one **policy instrument**.
  - Example: **Grants for public research** and **technology transfer**.

These links can be used to measure **how themes** and **instruments are closely related** to each other:

Map of STI Policy themes (Full 2017 dataset)



Business innovation themes

are linked to

public research system themes

and **research and innovation for society** themes

often through **knowledge transfer**

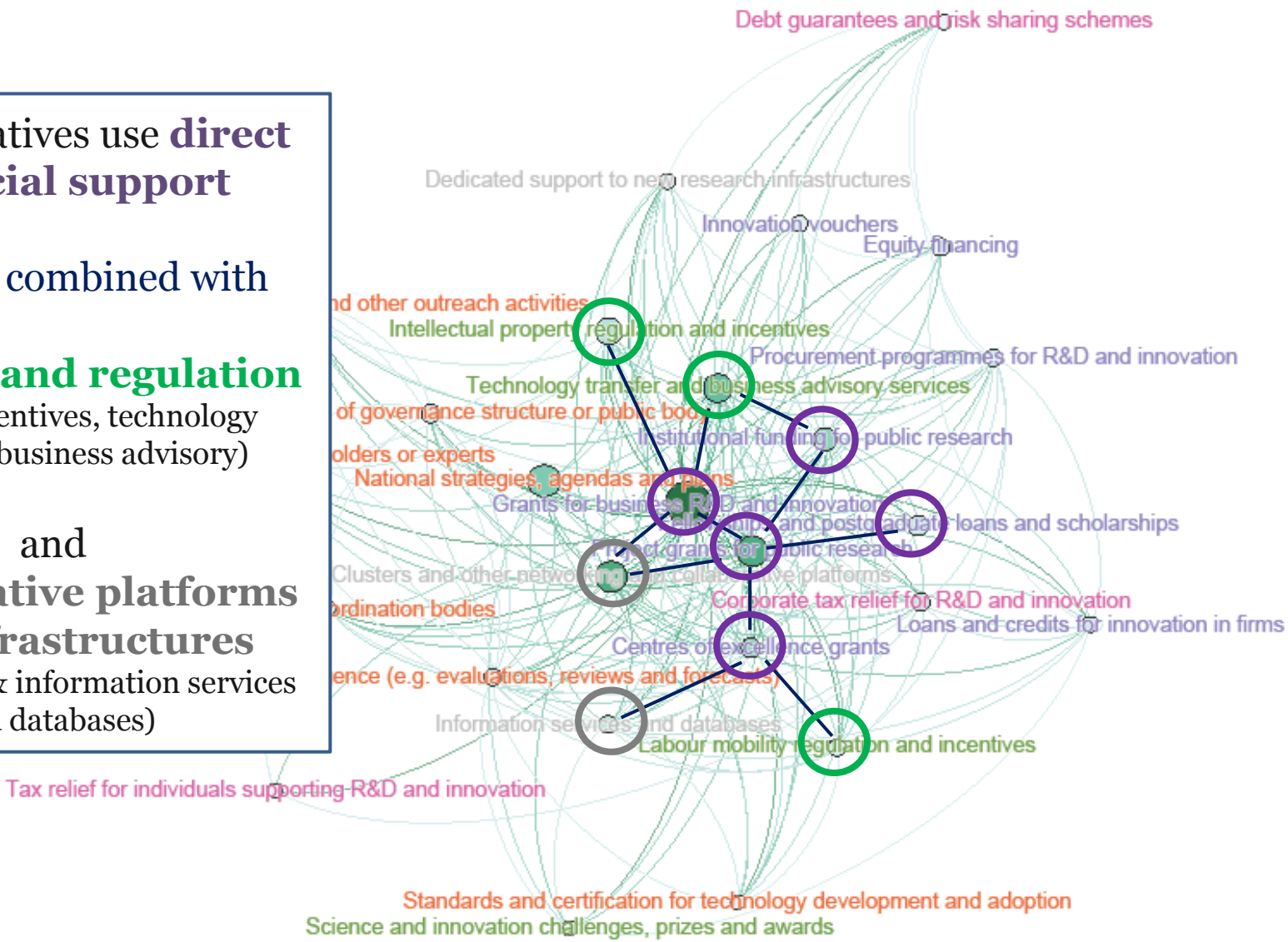
Map of policy instruments **for KT** (data subset)

Most initiatives use **direct financial support**

these are combined with

guidance and regulation
(e.g. IP incentives, technology transfer / business advisory)

and
Collaborative platforms and infrastructures
(networking & information services and databases)



Next steps for analysing 2017 STIP data

Ongoing work

- How do countries report **designing and implementing** policy instruments?
- How do instruments, target groups and budget ranges **vary depending on the policy issue** at hand?
- What **combinations of policy instruments** are reported by countries?
- Are there **cross-country patterns** in these dimensions?