



# **Data Dives:** Global Development Organizations and Big Data

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## Dive... in data



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# Dive... for questions

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- Can we predict projects likely to feature corruption?
- What characterizes an environment in which certain projects tend to fail (or under-deliver)?
- Is there a good match between a project's location and development priorities for that geographic region?
- What are patterns of knowledge transfer (e.g. does majority of contracts go to regional suppliers or?).
- What is the pattern between contracts awarded to companies from any given country and that country's relationship with the World Bank (e.g. amount of loans and programs it receives) or their employees (ex-development workers? Former Government officials?)

# Data dives- tapping in to non-traditional partners (Venice, Vienna, Washington D.C.)



# Case study: Network Analysis and WB Financial data



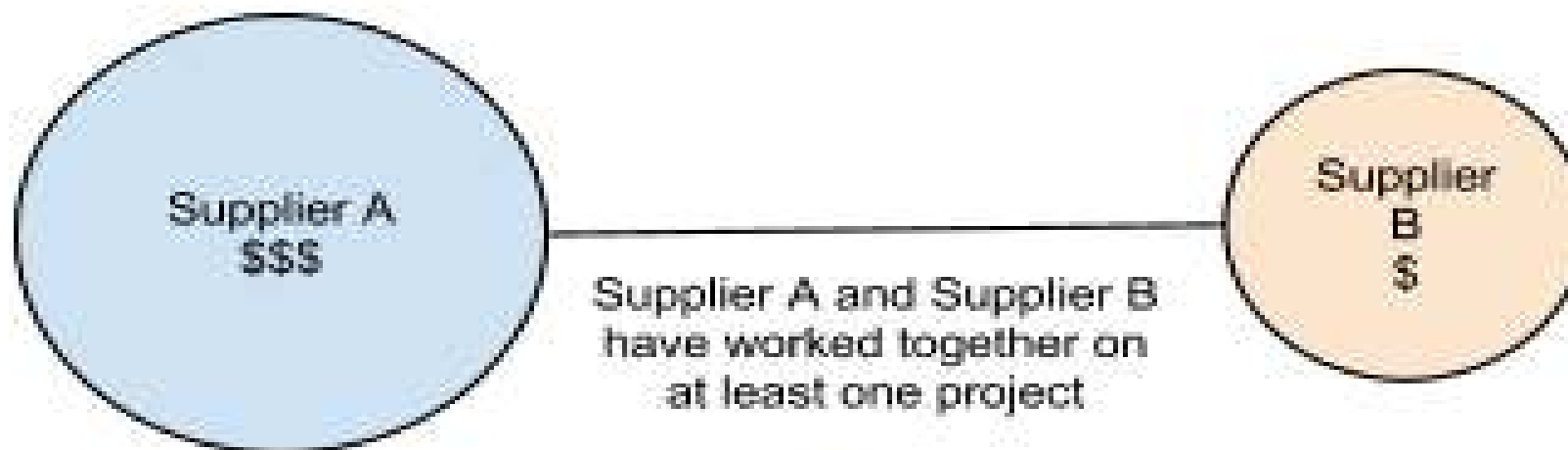
World Bank Group Finances

Sign Up | Sign In

Major Contract Awards

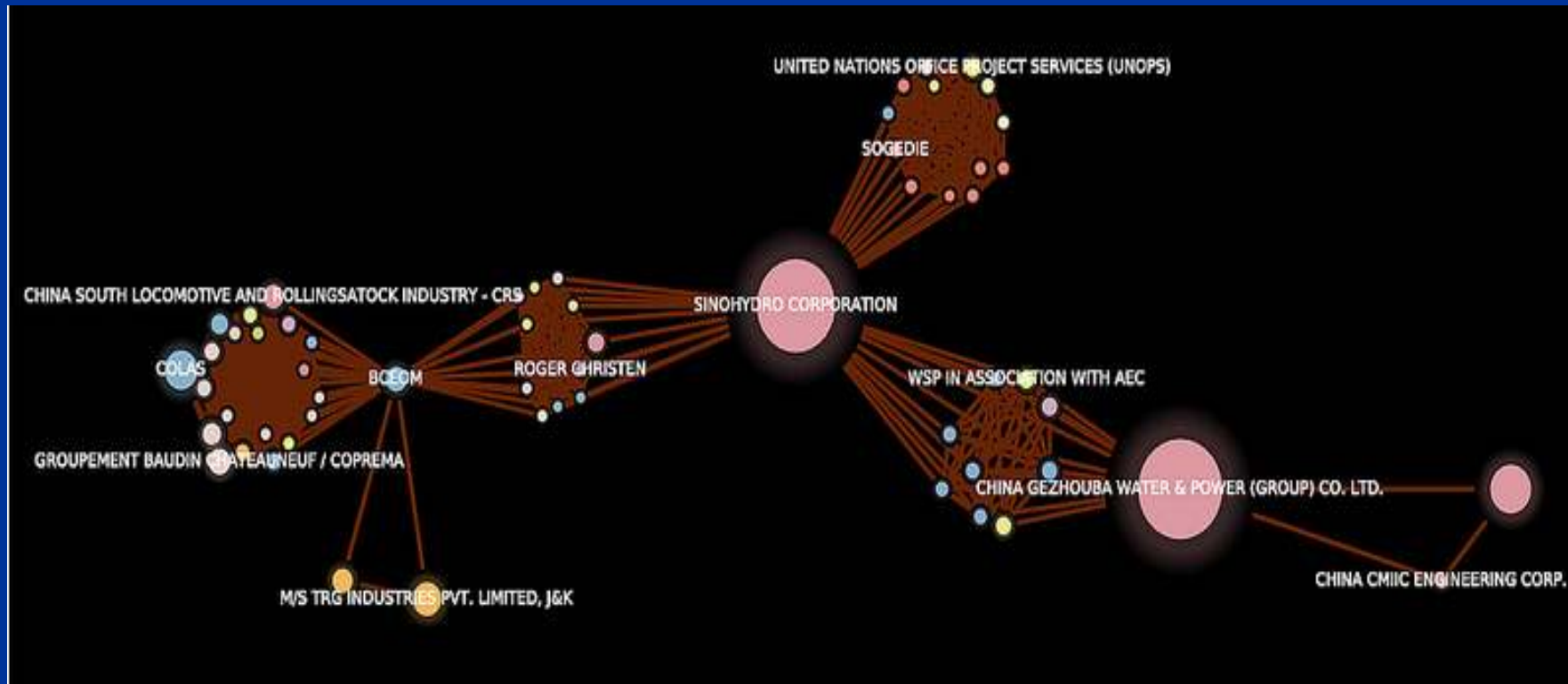


Find in this Dataset



*How we construct the network: we're linking two suppliers when they have worked together on at least one project*

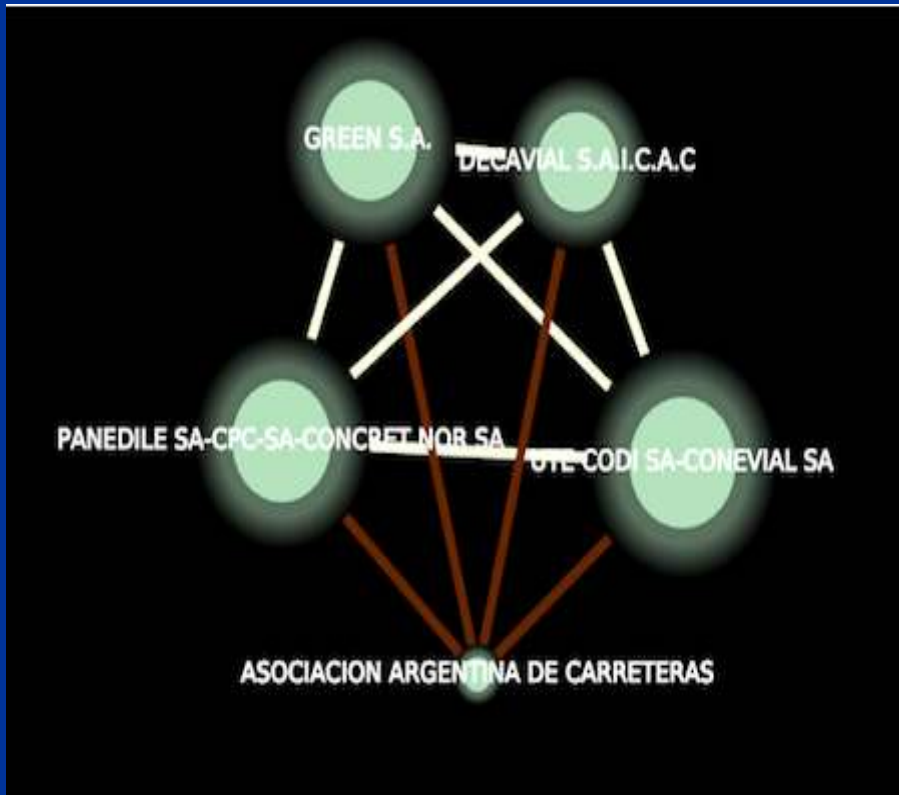
# Q1: Do certain companies tend to win majority of contracts (risk management)?



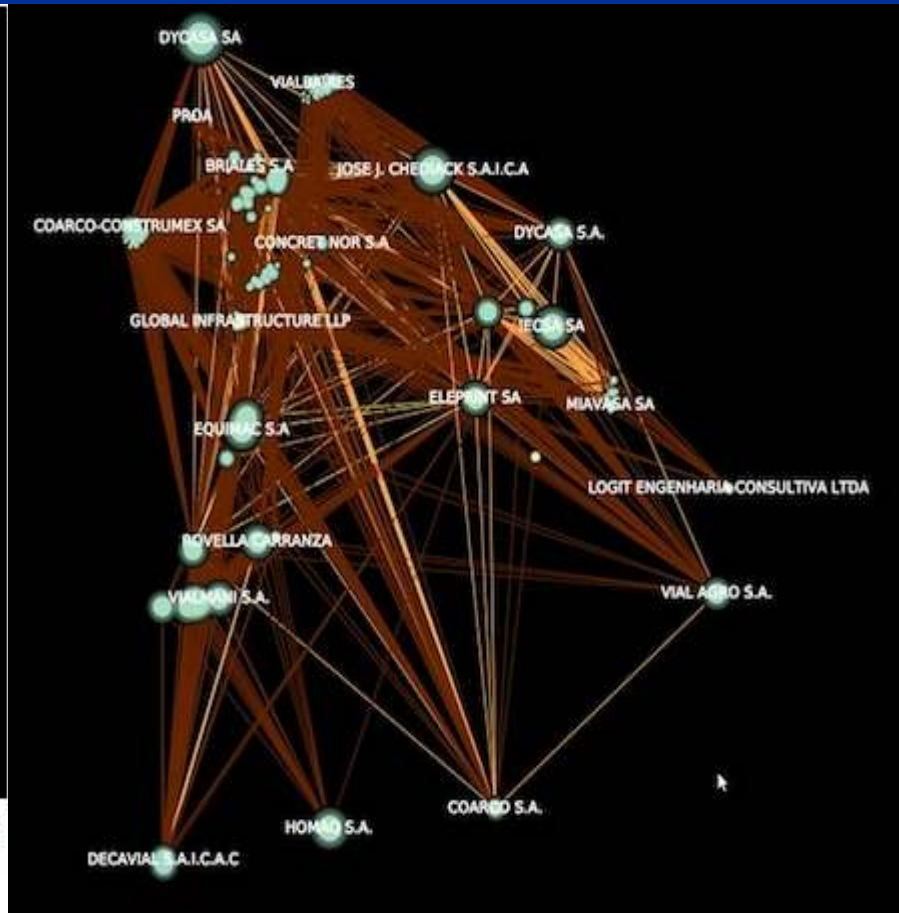
*Graph 3 – The transportation sector in 2007, a connected component of suppliers over six different projects. Big differences between node size means some order of magnitude of difference in the overall amount of money raised by a supplier (>>see larger image)*



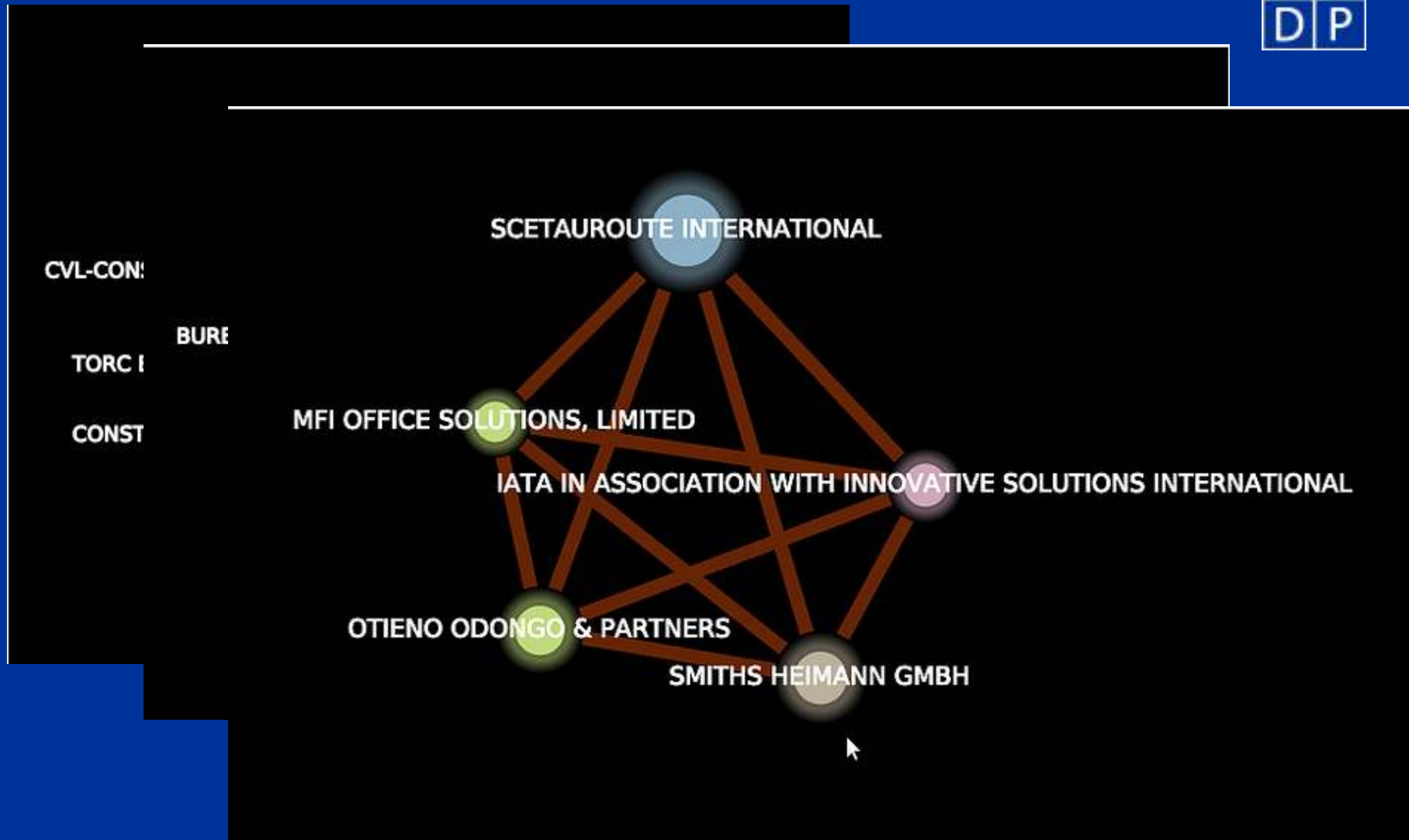
## Q2: Do certain clusters of companies tend to bid/win contracts in many projects?



Graph 5 – Interaction between companies: four of those five suppliers are involved in two projects (transports sector in 2007)



Q4: Knowledge transfer: do companies who win contracts come from the neighboring countries (south-south)?



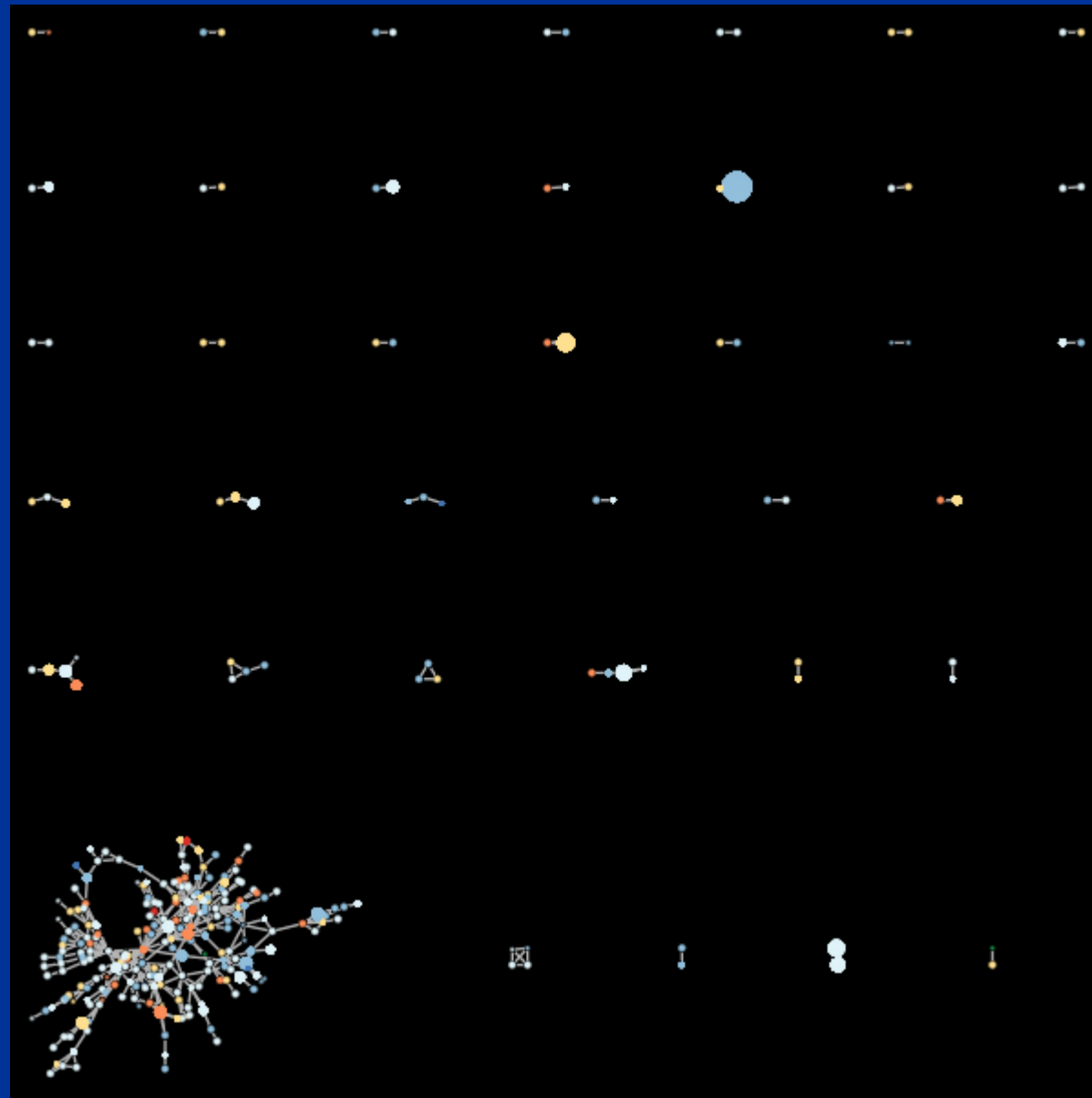


## Results=more data

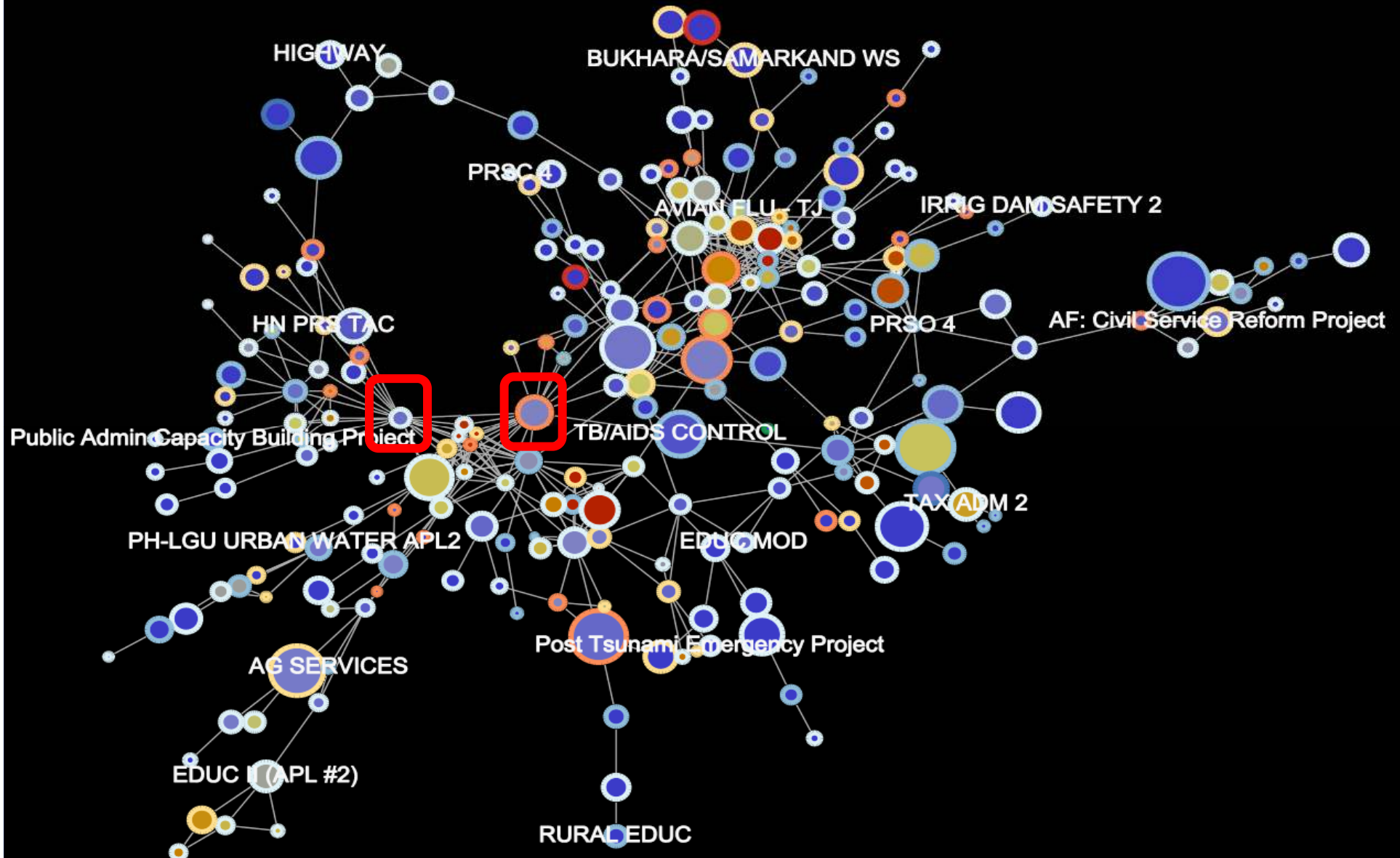
merging 'major contracts' with 'project evaluation' datasets



# Graph of all projects that share at least 1 supplier



# The densest part of the network...



**We opened an opposite of Pandora's box...**



**World Bank and UNDP global challenges on big data and development organizations**

- Big data improving effectiveness of globaldev's work?**
- Big data used for measuring poverty in real time?**
- Open for ideas and cooperation?**



# Get involved:

[europeandcis.undp.org](http://europeandcis.undp.org)



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