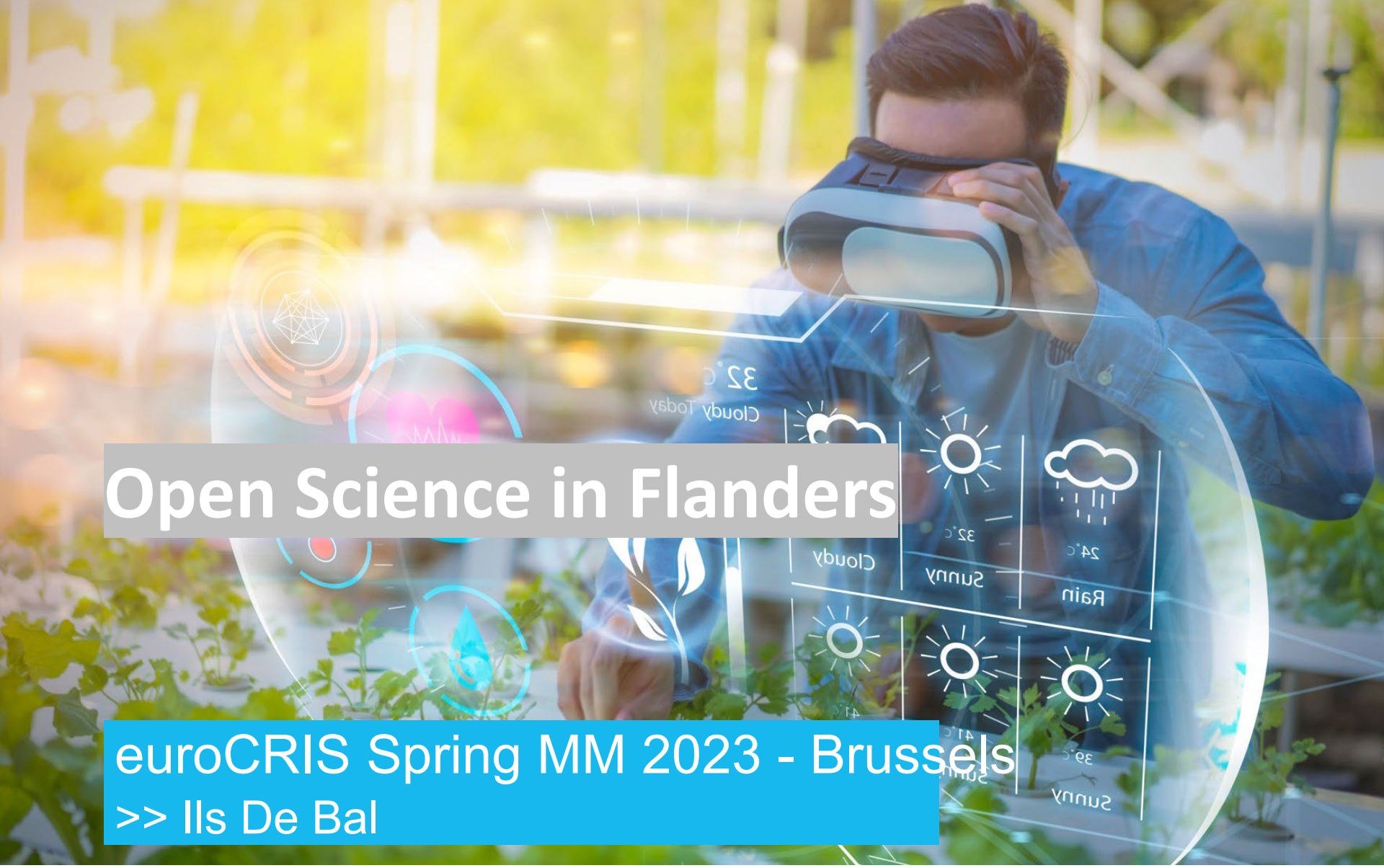

Open Science in Flanders

euroCRIS Spring MM 2023 - Brussels

>> Ils De Bal

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DEPARTMENT OF
ECONOMY, SCIENCE & INNOVATION

Flanders
State of the Art

Open Science started with…Open Access

- 2007: **Berlin Declaration on Open Access in 2007**
  - where Belgian research institutions and research funders agreed to support the dissemination of publicly funded scientific research through Open Access

- 2012: **Brussels Declaration on Open Access** following the Berlin Declaration on Open Access
  - Actively informing researchers on OA
  - Asking researchers to make their RO freely available in OA
  - Investigating if public authorities can cover OA publishing costs
  - Supporting creation of OA repositories
  - Investigating possibilities with regards to Open Data and Open Science

(https://openaccess.be/2012/10/22/brussels-declaration-on-open-access/)

History & Start of Open Science in Flanders

- EWI Focus Events on Open Science
- January 2018: White paper VLIR on “Research Data Management (RDM)
- January 2019: study in cooperation with Technopolis BV:
  - Mapping of Flemish situtation
  - Identifying good practices
- Policy recommendations for a governance on Open Science in Flanders, specifically taking into account:
  - EOSC challenge
  - FRIS as a “catalogue of metadata”
- Governance suggestion “Flemish Open Science Board” (FOSB) => Decision Flemish Govt Dec 2019: annually 5 million euros (2019-2024)

Flemish Government Agreement 2019-2024

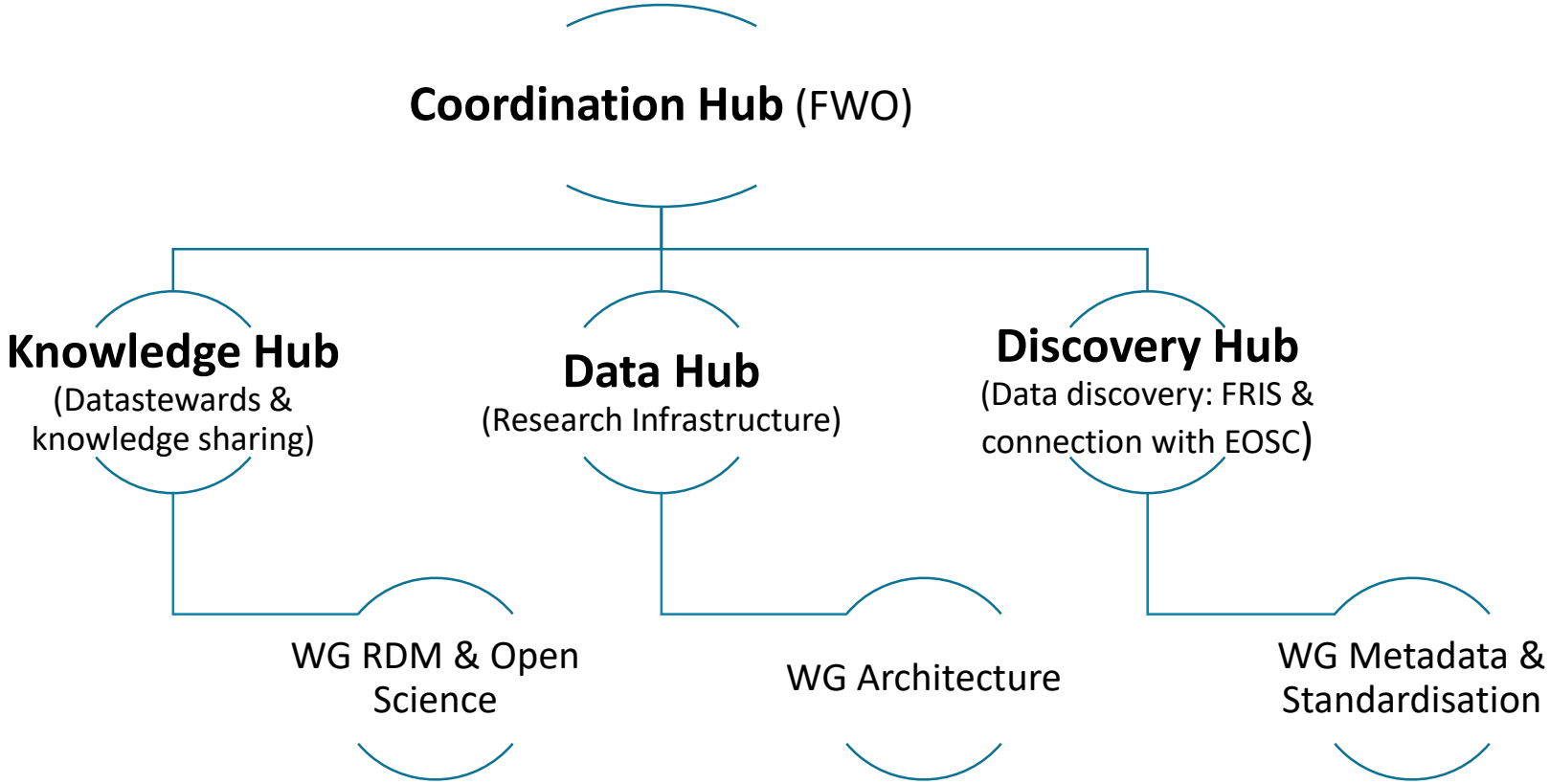
“The Flemish Government fully draws the map of Open Science in the European context, and we make our knowledge institutions responsible for implementing a policy in this area. Scientific research funded from public funds should be publicly accessible as soon as possible according to the principle, 'as open as possible, as closed as necessary'. This applies both to access to publications as well as for access to the underlying research data. The implementation of the Open Science policy is done in close consultation with all actors and stakeholders involved, and with proper attention in career-wise valuation and valorization of an Open Science mentality, for example through altmetrics.”

Open Science Initiative

- **End of 2019:** a go from the Flemish government
- **Kick off** 21st February 2020
- **Including all stakeholders** => representatives of 36 research institutes (Universities, Applied Universities, Post-initieel onderwijs, strategic research institutes, Flemish scientific institutes, other institutes) + funders
- **Advisory function** to the minister on roadmap and budget plan (€ 5 million per year: infrastructures/architectures + data stewards)
- Establishing **strategic principles**
- **Implementation** and executing through:
  - Flemish Research Data Network - Coordination hub (FWO)
  - Working groups (all stakeholders)
  - Project groups (all stakeholders)
- **Evaluation** of the Open Science Initiative in 2024 (continuation? Y/N? How?)

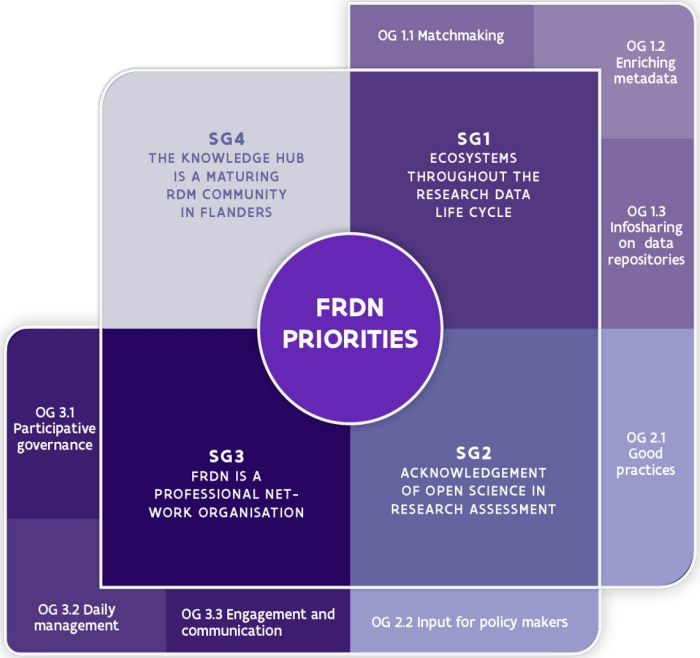
Phase 1: Hub structure - Working groups

- Hub structure with related working groups, related with task forces



Phase 2: Restructuring & next phase

- **NEW FRDN policy plan:**
  - Profound structure
  - Clear goals
- **2 Remaining working groups:**
  - RDM & OS
  - Architecture
- **New project groups:**
  - Enriching Metadata
  - Matchmaking
- **Horizontal:** Sensemaking initiative

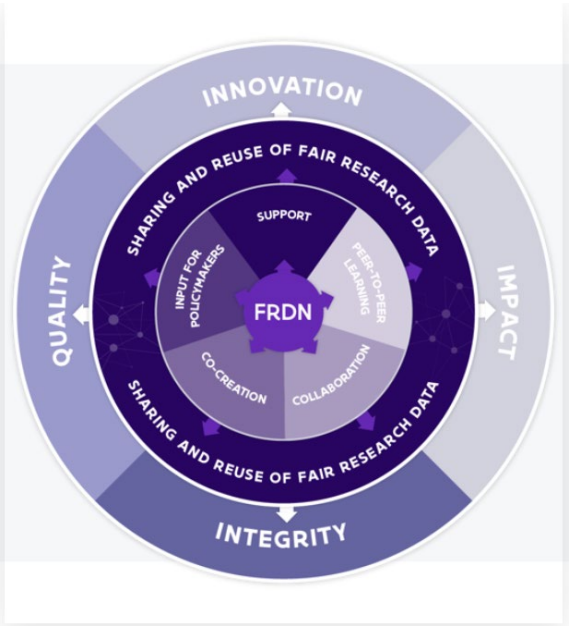


FRDN: Flemish Research Data Network

Vision/Mission of FRDN:

- Support Flemish research institutions in enabling researchers to exchange and reuse FAIR and/or open research (meta)data

- Organizing and providing tools to coordinating and facilitating peer-to-peer learning, collaboration(s), and co-creation, and by shaping the prerequisites for making research (meta)data interchangeable and reusable. (digital interaction and network days)



FRDN.
VLAANDEREN

Achievements (I)

- **WG RDM & Open Science (and its Taskforces):**
  - Translating OS ambitions in KPI's (https://www.ewi-vlaanderen.be/sites/default/files/downloads/bestanden/5fc5f512b328e9000c0007f3.pdf)
  - Defining a reporting template to be used for the annual reports
  - Founding the FRDN Knowledge Hub: defining organisation, houserules and goals
  - Defining a minimal uniform DMP-template (based on existing FWO & EU templates)
  - Defining the measurement of the KPI's (FRIS)

- **WG Architecture:**
  - Analysis and inventory of use cases which led to an initial set-up of the Flemish Data Architecture
  - Organizing matchmaking sessions (knowledge exchange)

Achievements (II)

- **WG Metadata & Standardisation:**
  - Defining the metadatamodel “Datasets”
  - Defining extra metadata fields to make it possible to measure the OS KPI’s

  ➡ Metadatamodel “Datasets” + extra fields needs to be delivered to FRIS

- **Coordination Hub:**
  - Translation of the agreement of the Flemish government to an operational roadmap
  - Redefining goals and structure
  - Bringing datastewards together via communication channels (website, basecamp, network days,…)

Open Science & FRIS

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- FRIS as discovery hub: gateway to EOSC (e.g. through OpenAire)
- FRIS as instrument to monitor the general progress of Open Science in Flanders through the defined KPI's:

- **ORCiD KPI:** researchers that receive public funding should have an ORCiD
- **DMP KPI:** projects that receive public funding should have a Data Management Plan (DMP)
- **Open Access KPI:** peer-reviewed journal articles resulting from publicly funded research should become available in Open Access
- **FAIR KPI:** Research data underlying journal articles resulting from publicly funded research should become as FAIR as possible
- **Open Data KPI:** Research data underlying journal articles resulting from publicly funded research should become openly available.

KPI's translation

- **Translation of KPI-definitions into FRIS-metrics:**

  E.g. Definition: "researchers that receive public funding" should have an ORCiD

  In FRIS: researchers that have an affiliation that is active on the reference date and have a link to a project with public funding

- **Formulated in *Technical Forms*** and made publicly available

- **Advantages:**
  - Transparancy: results are reproducable
  - Consistenty: all institutions measured the same way
  - Reduces administrative burden: for those institutions already integrated
  - Increases data quality: institutions not yet connected to FRIS need to gather the same data and data quality to measure the KPI themselves

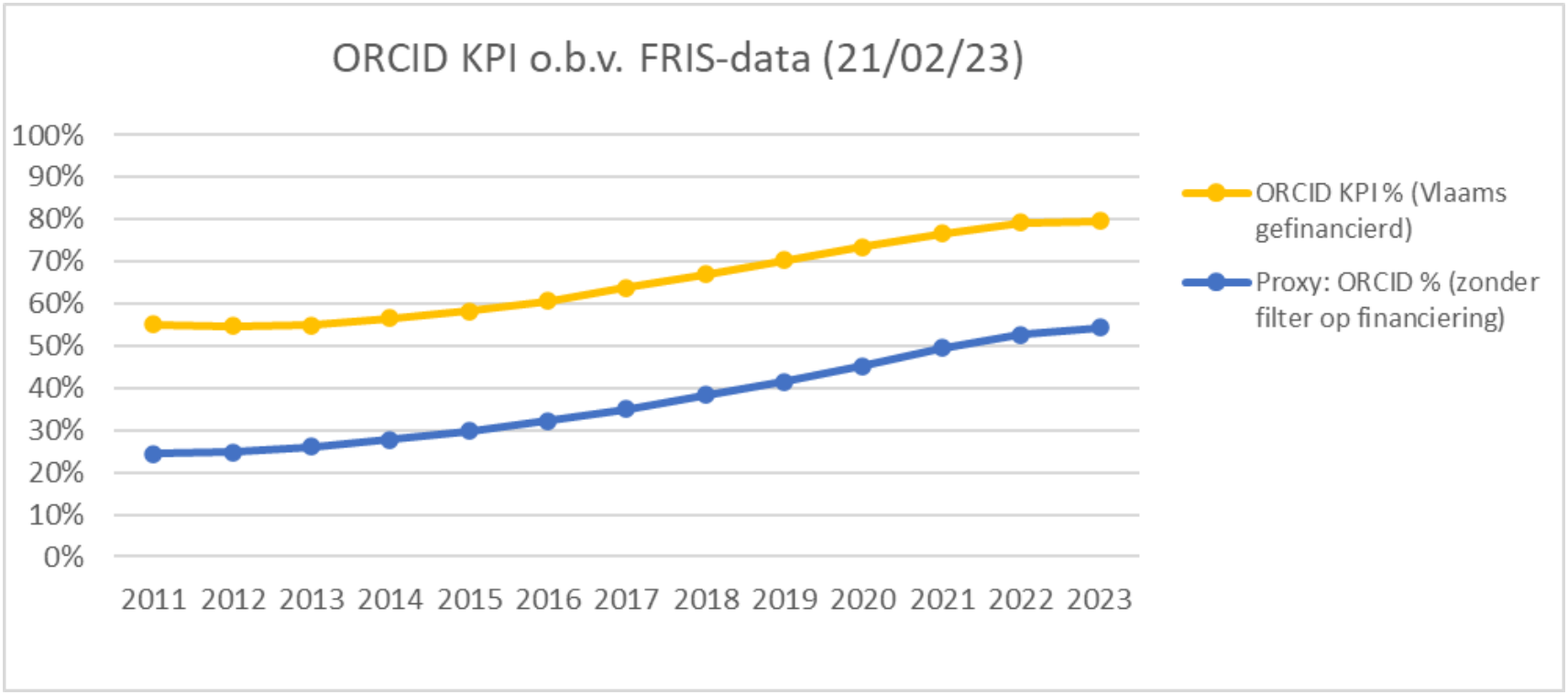
KPI's & goals: 3 tracks

SETTING GOALS:

- 3 possible timelines in degree of ambition: most ambitious track = shorter timeline
- Zero-measurement will determine the track
- Zero-measurement will be re-measured every year – changes of track possible

	ORCiD KPI: Goals per track		
year to be measured	**track 1**	**track 2**	**track 3**
2020 (zero measurement)	>20%	10% - 20%	<10% or not measurable
2021	30%	20%	action plan
2022	60%	30%	20%
2023	90%	60%	30%
2024	95%	90%	60%
2025	95%	95%	90%
2026	95%	95%	95%

Example of aggregated KPI ORCID



Lessons learned: pick a few

- Goals are clear but the way to achieve them is slow and depends on people, not systems
- Interaction between hierarchy/levels isn't simple: information is not shared bottom-up/top-down
- Collaboration and communication is key to success
- Evaluation and possible reshuffling needed
- Open spirit/room for living labs needed
- Measurement via FRIS: data is data: transparancy, consistency, comparability, less administrative burden

Questions for you!

- How is OS measured in your country? Within your institute?
- What is according to you key to success?
- How can we accelerate the mentality shift amongst researchers?
- Do you see other pitfalls?

Questions?

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