

# Metrics for KT:

## Overview of ASTP Activities, Alliances and opportunities



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Cécile Cavalade, ASTP VP Survey and Impact

# ASTP Annual Survey

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Annual overview  
of relevant metrics  
and performance indicators

KT landscape  
at a pan-European level



<https://www.astp4kt.eu/resource-center/publications/>



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# ASTP Annual Survey – main indicators

**475** responding KTOs from **27** European countries



Source: ASTP Survey Report on Knowledge Transfer Activities in Europe for Financial Year 2017



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# ASTP Annual survey - report

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## Top five most common metrics (2019 Report, FY2017)

Invention disclosures (n=452)

Licence agreements (n=413)

Gross revenue from IP (n=404)

Number of spin-off (n=359)

Number of start-ups (n=333)

Priority patent applications (n=263)



# ASTP Annual survey - data collection

## ASTP online survey

- ✓ Diffusion/communication
- ✓ Representativity & continuity
- ✓ Data availability (normalisation)

## National association dataset

- ✓ Data compatibility
- ✓ Confidentiality

KTi (Ireland)  
Netval (Italy)  
RedOTRI (Spain)  
Research England (UK)  
Réseau C.U.R.I.E. (France)  
Universities Denmark (DK)

With support from

NAAC, Réseau LIEU (BE), Transfera (CR), Transfer Allianz (DE),  
PACTT (PL), NATT (RU), SNITTS (SE), USIMP (TU)

### ASTP SURVEY ON KNOWLEDGE TRANSFER ACTIVITIES FY2018

#### Research Effort, Agreements with Non-Academic Parties

9. Please give the aggregate Research Expenditures in FY2018 for all PRO(s) for which your KTO is reporting data under this survey (€).

*Include share of academic costs dedicated to research (e.g. salary costs of permanent academic staff, costs of administrative support, capital expenditures on new equipment). Exclude cost of new buildings or land.*

10. What was the (combined) research effort of your PRO(s) in FY2018, expressed in FTEs?

*Include time spent by academic staff on research (also include FTEs for post-docs, PhD students, research fellows, technicians and the like). Exclude time spent by staff on teaching.*

11. Please use this comment box to provide context where necessary to any of the numbers provided under Questions 9 and 10. Insert comment if there are reasons to assume that the numbers provided may not be comparable with those provided by other European institutions.

*e.g. for some PROs, a lot of research work is being performed by PhD students on stipends, who do count towards the number of FTE in research but are not on the payroll of the PRO and so do not contribute to the Research Expenditures etc.*



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# ASTP Annual survey – response rate

## 2019 Report, FY2017



Relative survey response rate accross Europe

Country	FY2017	FY2016	FY2015
	2019 (n = 475)	2018 (n=474)	2017 (n=419)
United Kingdom	166	162	160
Spain	71	69	70
Italy	55	61	62
France	52	58	0
Ireland	27	24	25
Denmark	14	10	10
Switzerland	13	2	17
Germany	12	18	18
Poland	10	9	8
Belgium	9	8	7
Netherlands	8	13	9
Finland	6	5	3
Hungary	5	4	3
Czech Republic	5	8	1
Sweden	4	4	7
Norway	4	3	8
Lithuania	3	4	0
Austria	2	3	3
Turkey	2	3	0
Russian Federation	2	0	0
Portugal	2	1	2
Slovak Republic	1	1	3
Luxembourg	1	1	1
Croatia	1	0	1
Latvia	0	1	0
Malta	0	1	0
Serbia	0	1	1

Table 1: Overview of ASTP Survey response rates FY2017, 2016 and 2015



# ASTP Annual survey – challenges

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## Survey quality

- ✦ Representativity and coverage
- ✦ Harmonisation of national data set for core indicators
- ✦ Normalisation

## Value for our members

- ✦ Individual KTOs
- ✦ National associations
- ✦ European visibility of the profession

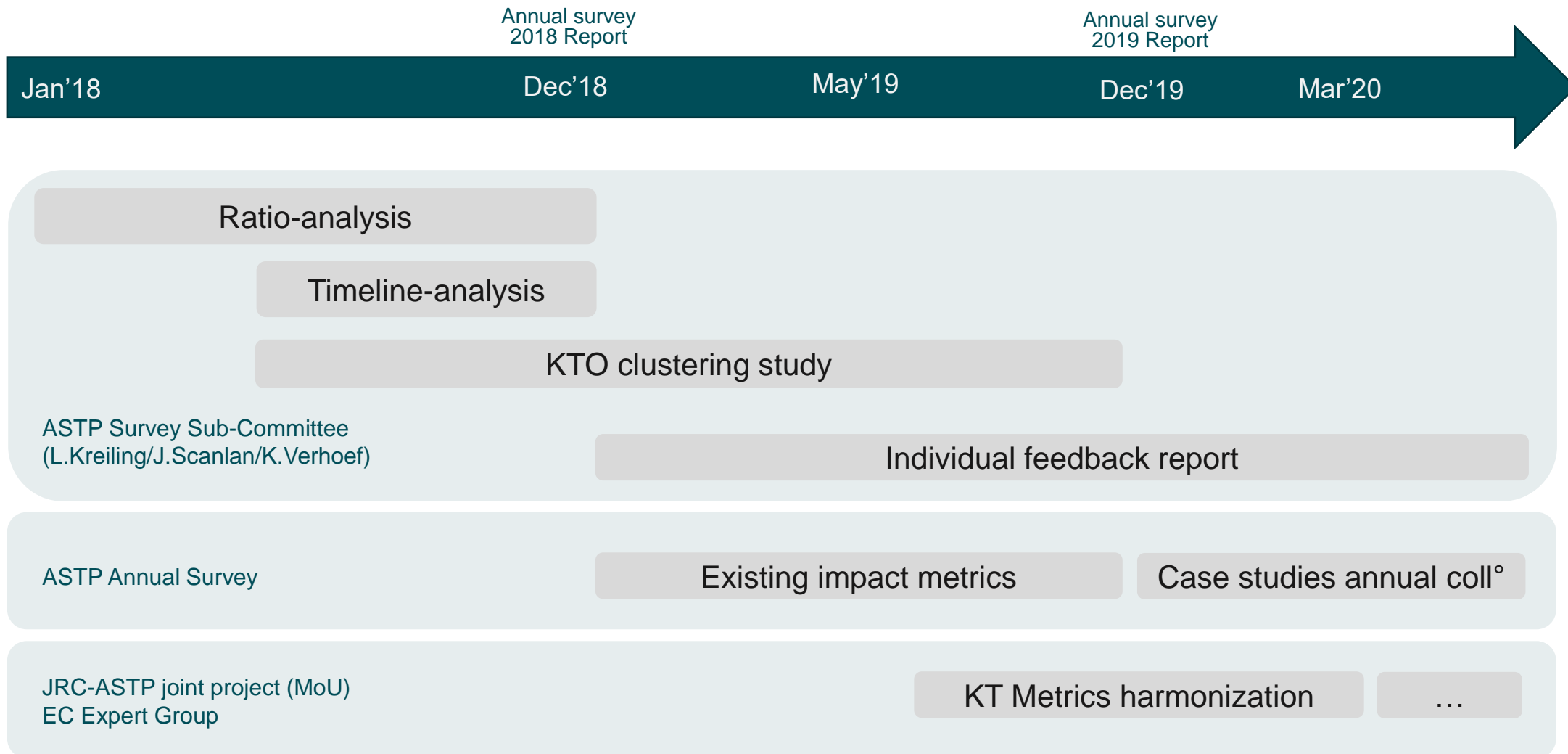
## Emerging topic: Impact assessment/measurement

- ✦ KT impact within research impact thematic
- ✦ KT beyond commercialisation of IP
- ✦ European level action



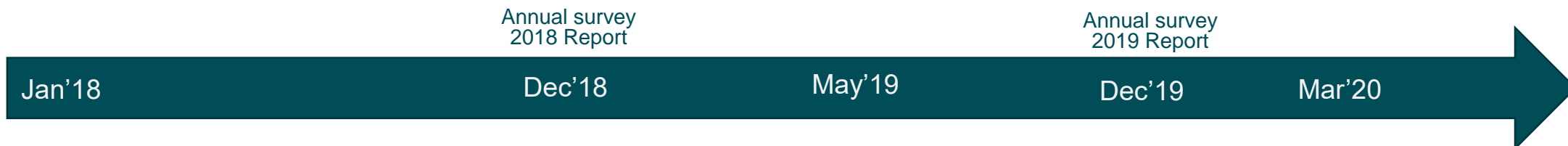


# ASTP KT metrics projects & developments





# ASTP Metrics projects & developments

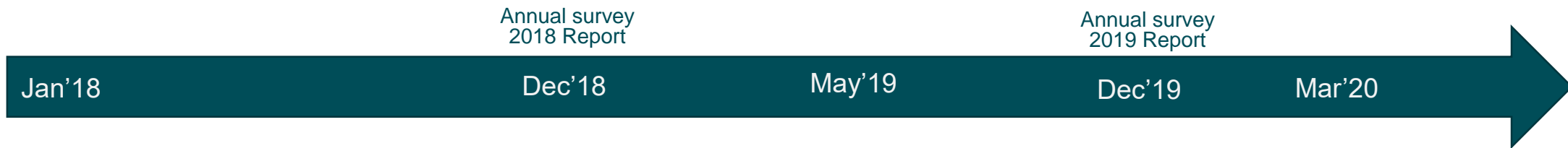


## Ratio-analysis

Ratio	Section name
A. PAT/ID (first granted patents/invention disclosures)	Recording and protecting intellectual property
B. LOA/ID (Commercialisation deals/invention disclosures)	Commercialising new ideas
C. SO/LOA (Spin-offs/commercialisation deals)	Commercialisation routes
D. RA-EUR/Research spent (income from industry agreements to PRO research expenditure)	Industry funded research



# ASTP Metrics projects & developments



Ratio-analysis

**KTO clustering study**

ASTP Survey Sub-Committee  
(L.Kreiling/J.Scanlan/K.Verhoef)

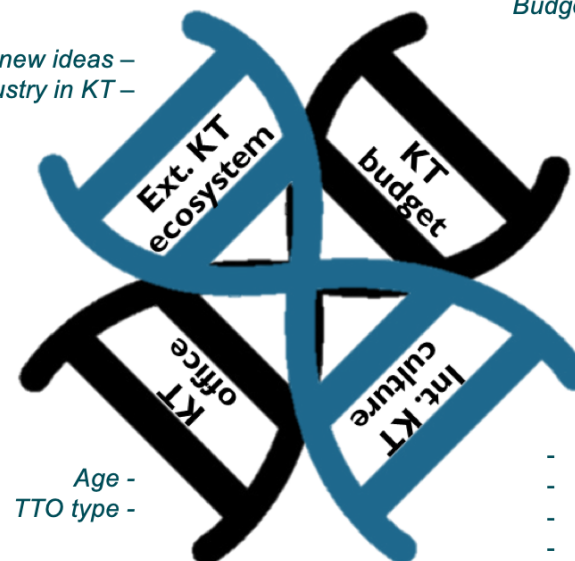
## Framework – 'KTO DNA'

- ✦ Captures fundamental characteristics that drive KT activities in KTOs
- ✦ Use of indicators based on **ratios**, rather than crude metrics

*Entrepreneurship culture to invest in new ideas –  
Engagement of local industry in KT –*

## Budget available

- for protection of IP
- for salary and all operational costs (less that used for IP protection) per KTO employee



- Importance of IP development
- KT commitment
- KT embedded in university
- Level of applied research at university



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# ASTP Metrics projects & developments

Annual survey  
2018 Report

Annual survey  
2019 Report

Jan'18

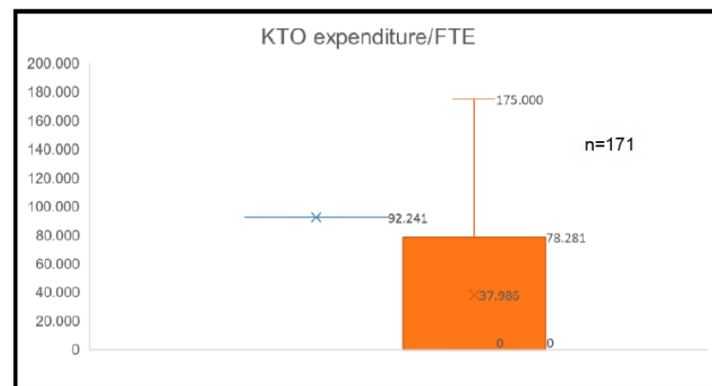
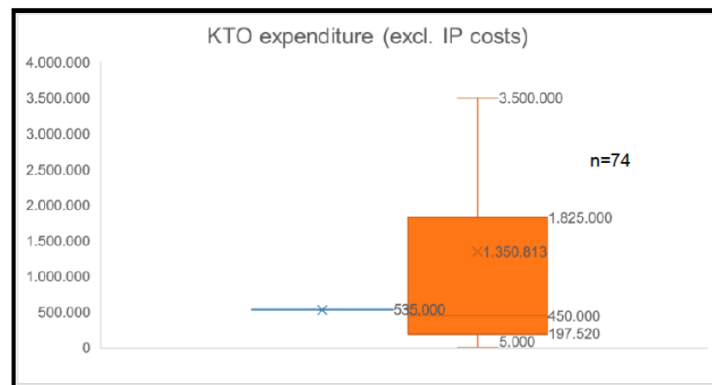
Dec'18

May'19

Dec'19

Mar'20

## Individual feedback report

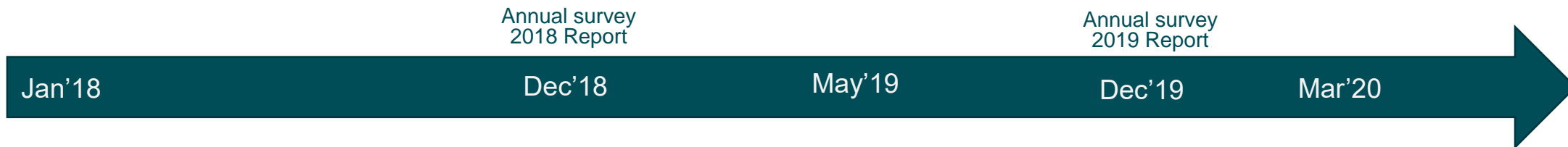


- Age of KTO
- Number of FTEs in the KTO
- KTO Expenditure (excl. IP costs)
- KTO Expenditure/FTE
- IP costs
- PRO research expenditure
- Number of FTE engaged in research
- Research expenditure /research FTE
- Number of new research and consultancy contracts with industry
- Total value of research and consultancy contracts with industry
- Percentage of research budget coming from industry
- Number of Invention disclosures /10M€ research expenditure
- Percentage of Invention disclosures for which a patent application is filed
- Percentage of patent families that are licensed or optioned
- Percentage of patent families that are licensed or optioned
- Number of Licenses, Options and Assignments concluded
- License income as a percentage of total research expenditure
- Number of spin-off companies/100M€ research expenditure
- Number of start-up companies

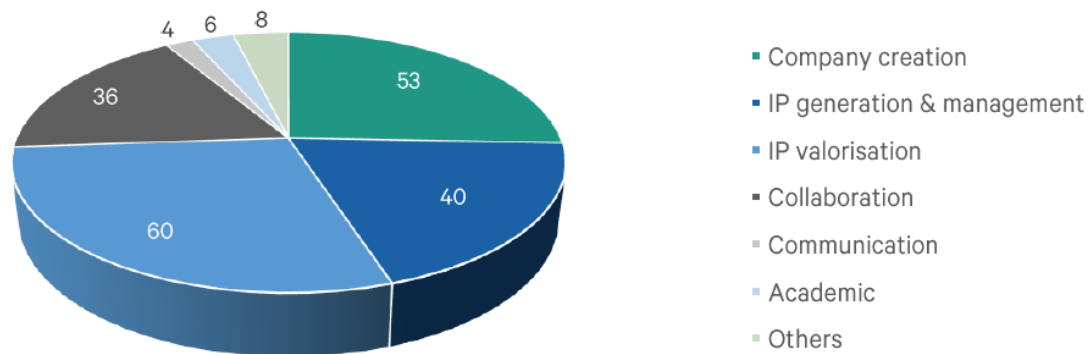


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# ASTP Metrics projects & developments



Impact indicators used or proposed by responding KTOs (n=53)



ASTP Annual Survey

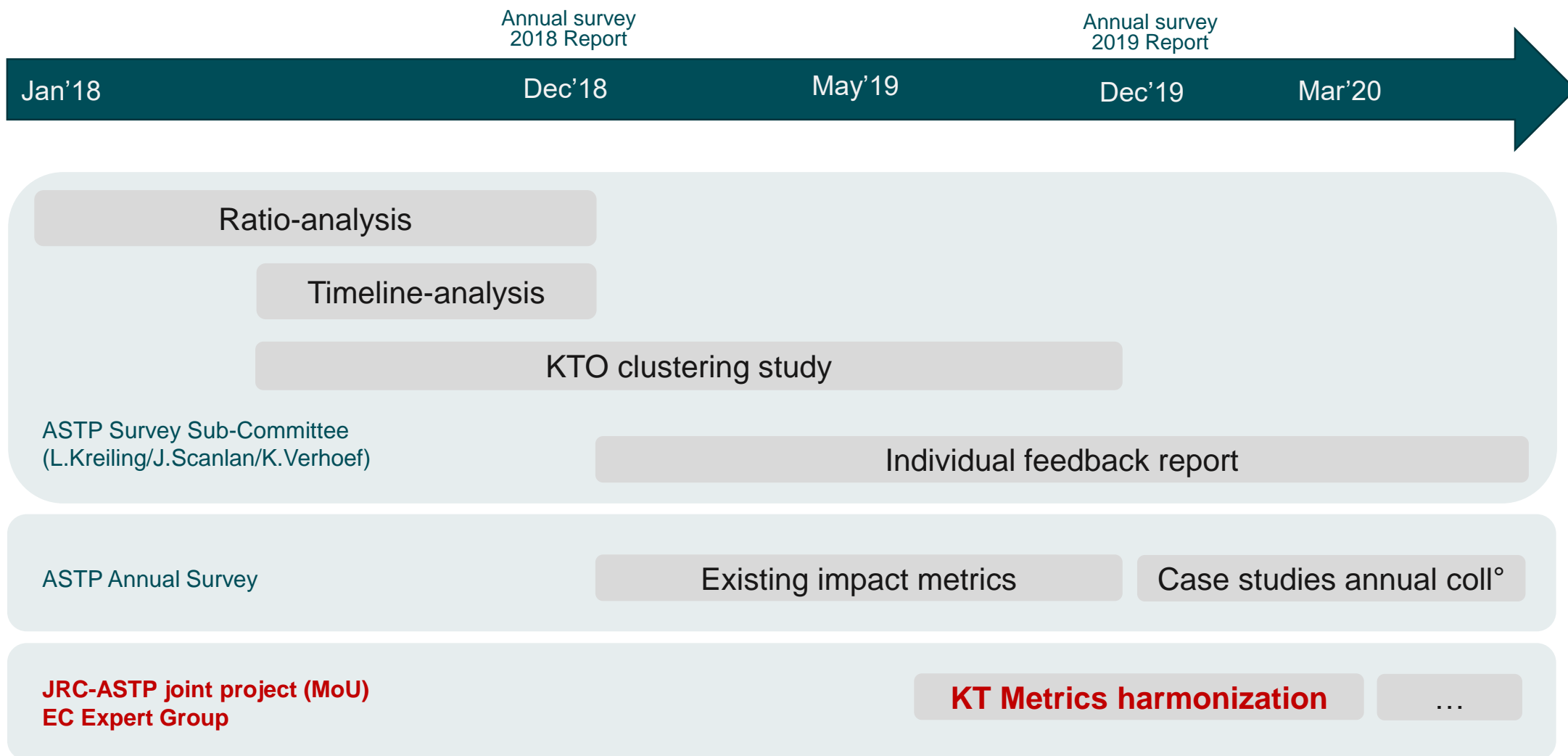
Existing impact metrics

Case studies annual coll°



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# ASTP Metrics projects & developments



# Metrics for KT : overview of ASTP

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Thank you for your attention

Contact: [Survey@astp4kts.eu](mailto:Survey@astp4kts.eu)

## Survey Committee

**Cécile Cavalade**, Chair, VP Survey and Impact | Université libre de Bruxelles, Belgium

**Koen Verhoef**, Vice-chair | Netherlands Cancer Institute, Netherlands

**Tamas Bene**, University of Debrecen, Hungary

**Lidia Cerezo**, Universidad Politécnica de Madrid (UPM), Spain

**Laura Kreiling**, Paris-Sud University, France

**Olivier Vande Vyver**, University of Mons, Belgium

**Jürgen Walkenhorst**, University of Vienna, Germany



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