



European
Commission

JRC Week

on Composite Indicators and Scoreboards

JRC, Ispra
05-09 November 2018



JRC Week on Composite Indicators and Scoreboards

The JRC Week on Composite Indicators and Scoreboards is an **annual five-day event** during which local and international policy and decision makers, academics, think tanks, and practitioners in a wide range of socio-economic fields learn from best practices and showcase their capacity to inform policies through the use of indicator systems that summarise multidimensional concepts from social rights and social trust to innovation and competitiveness.

- ▶ *What are the state-of-art methods to develop and audit indices and scoreboards?*
- ▶ *How much faith can we have in multidimensional frameworks and how can common pitfalls be avoided?*
- ▶ *How can indices and scoreboards better inform policy and be communicated to the wider public?*
- ▶ *What already successful tools can be further adopted?*



3 days

16th JRC Annual Training
on Composite Indicators
and Scoreboards

05 MON

06 TUE

07 WED



2 days

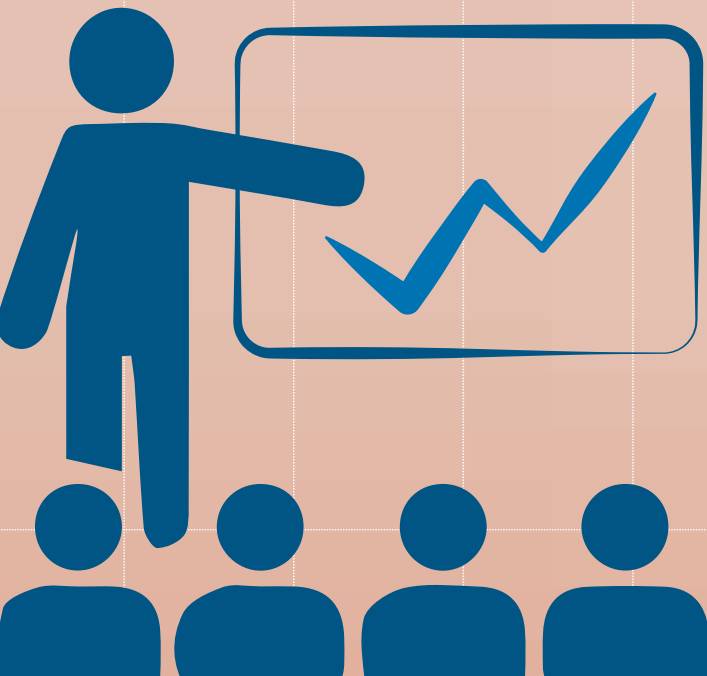
Composite Indicators
and Scoreboards
Community of Practice

08 THU

09 FRI

16th JRC Annual Training on Composite Indicators and Scoreboards

JRC, Ispra
05-07 November 2018



The 16th JRC Annual Training on Composite Indicators and Scoreboards will offer lessons learnt from the JRC assessments on more than 100 well-known composite indicators and scoreboards. The training consists of presentations, Q&A sessions and a hands-on session using the COIN tool (Excel-based) for developing and statistically assessing a composite indicator or scoreboard. Participants will also have the opportunity to discuss their composite indicators/scoreboards and receive advice from the JRC.

Objectives

To present the concept of composite indicators, strengths and weaknesses and domains of frequent use;
To provide guidelines on the development of the theoretical framework and selection of indicators;
To offer practical examples on the preparation of the data set, discuss the importance of the analysis of statistical coherence of the framework, the implications of the choice of the weighting and the aggregation method and the robustness and sensitivity analysis;
To learn by best practices on how to ensure transparency and statistical soundness when developing composite indicators;
To offer an Excel-based practical guide for the construction of composite indicators.

Target Group

Researchers and policy analysts with an interest on multidimensional measures and multi-criteria analysis.

Lecturers & organising team

V. Alberti, M. Alvarez, W. Becker, G. Caperna, C. Cocco, G. Damioli, P. De Pedraza, M. Del Sorbo, B. D'Hombres, M. Dominguez-Torreiro, V. Montalto, C. Moura, A. Neves, H. Norlen, F. Panella, E. Papadimitriou, D. Vertesy, and M. Saisana

MONDAY | 05 November 2017

12:00 Registration & Welcome Lunch

13:00 Opening & Introduction
Sven Langedijk, Head of Unit

13:30 Interactive Q& A session

13:45 Indices & Scoreboards: Ten steps guide
(uses and misuses, framework, indicators, data treatment, weighting, aggregation, statistical coherence, communication, transparency)

14:30 Steps 1 & 2: Framework & Indicators
(definition, added-value, multidimensionality, selection criteria for indicators)

16:00 Coffee break

16:30 Step 3: Outliers & Missing data
(Outliers: winsorization, trimming, Box-Cox; Missing data: mean/median, hot-deck, EM, cross-sectional trend analysis.)

18:00 End of first day

TUESDAY | 06 November 2017

09:00 Welcome Coffee

09:30 Step 4: Normalisation
(min-max, distance to best performer, z-scores, categorical, ranking)

10:15 Step 5: Weighting methods (I)
(statistical: principal component analysis, data envelopment analysis)

11:30 Coffee break

12:00 Step 5: Weighting methods (II)
(participatory: budget allocation, analytic hierarchy process)

13:15 Lunch break

14:30 Step 6: Aggregation rules
(generalized mean, median ranking, Borda, Condorcet, Copeland, Arrow-Raynaud, Kemeny)

16:00 Coffee break

16:30 Step 7: Statistical coherence (I)
(correlations, cross-correlations)

18:00 End of second day

WEDNESDAY | 07 November 2017

09:00 Welcome Coffee

09:30 Step 7: Statistical coherence (II)
(principal component analysis, exploratory factor analysis, Cronbach alpha)

11:00 Coffee break

11:30 Step 8: Quality control & Robustness
(Pearson correlation coefficient, non linear Pearson correlation ratio, uncertainty and sensitivity analysis)

13:00 Lunch break

14:00 Steps 9 & 10
Visualization & Communication (back to the data, radar plots, scatterplots, heatmaps)

15:00 Interactive Q & A Session

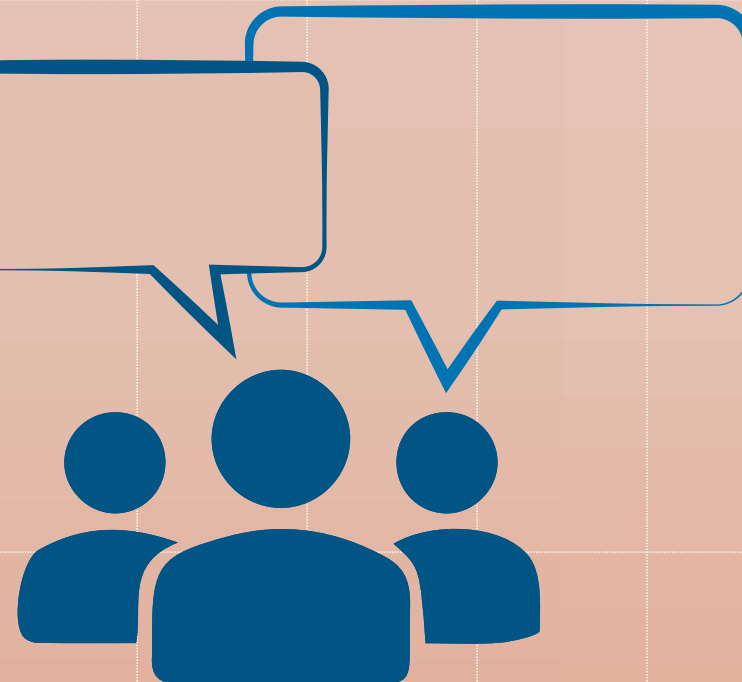
15:30 Coffee break

16:00 Audit your index: JRC-COIN tool
(an Excel-based guide for assessing, partially, the soundness of composite indicators and scoreboards)

18:00 End of training

Composite Indicators and Scoreboards Community of Practice

JRC, Ispra
08-09 November 2018



Purpose and Scope

The purpose of the Community of Practice on Composite Indicators and Scoreboards (CoPCOIN) is to bring together policy analysts and researchers from the European Commission, international organizations, think tanks and the academia, to foster a practical exchange of experiences across a wide range of key policy areas that are monitored through composite indicators and scoreboards.

- ▶ *How should indices and scoreboards be used for policy and what should be avoided?*
- ▶ *How can indices and scoreboards be communicated to the wider public?*

This year's discussion topics include:

- ▶ Fairness, Inequality and Poverty
- ▶ Social Rights & Social Trust
- ▶ Resilience & Risk Management
- ▶ Sustainable Development & Sustainable Governance
- ▶ Education & Skills
- ▶ Ageing societies & Migration
- ▶ Innovation & Digital Transformation
- ▶ Competitiveness & Attractiveness

CoPCOIN will facilitate collaboration between scientists and policy makers on the sensible development and responsible use of indices and scoreboards, encapsulating the 'big picture' on matters that are crucial for the EU and helping to shape policy and monitor progress.

THURSDAY | 08 November 2017

09:15 Welcome

09:30 Panel I
Fairness, Inequality and Poverty

11:00 Coffee Break

11:30 Panel II
Social Rights & Social Trust

13:00 Lunch buffet and discussions

14:00 Panel III
Resilience & Risk Management

15:30 Coffee Break

16:00 Panel IV
Sustainable Development & Sustainable Governance

17:30 End of first day

FRIDAY | 09 November 2017

09:30 Panel V
Education & Skills

11:30 Coffee Break

12:00 Panel VI
Ageing societies & Migration

13:00 Lunch buffet and discussions

14:00 Panel VII
Innovation & Digital Transformation

15:30 Panel VIII
Competitiveness & Attractiveness

17:00 Concluding Remarks

17:30 End of the Community of Practice Meeting

If you would like to learn more about the activities of the European Commission's Competence Centre on Composite Indicators and Scoreboards (COIN), please contact us by:

E-mail: jrc-coin@ec.europa.eu

Tel: **+39 0332 78 6448**

Web: <https://ec.europa.eu/jrc/en/coin>

<https://composite-indicators.jrc.ec.europa.eu/>

For logistics: Susanna.Loffelholz@ec.europa.eu

The European Commission's science and knowledge service

Joint Research Centre

JRC Mission

As the science and knowledge service of the European Commission, the Joint Research Centre's mission is to support EU policies with independent evidence throughout the whole policy cycle.



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