INTRODUCTION
Cost Benefit Analysis (CBA) is an internationally accepted practice to assess investment projects and is a mandatory requirement for major projects applying for co-financing from the European Structural and Investment Funds (ESIFs, Art. 100-103, EC Regulation 1303/2013). In December 2014, a new CBA Guide has been adopted by the European Commission, including a reinforced operational approach to investment appraisal in the framework of the EU Cohesion Policy.

OBJECTIVE
At the end of programme participants will be able to understand the principles and methods of CBA and, for the advanced course, to assess the completeness and quality of a project dossier as well as to design and prepare a complete CBA.

STRUCTURE
The school is organised in two Modules:

- Module I: General principles and methods of CBA (18-20 September).
- Module II: Sector applications of CBA (20-23 September).

Module I is designed for beginners who have limited knowledge and previous exposure to CBA or those who want to refresh their knowledge of the conceptual framework of a standard CBA based on the approach of the new Guide.

Module II is designed for those who are already familiar with the CBA techniques, have previous exposure to CBA or have at least attended Module I. It provides a more advanced training course focused on the practical applications of the CBA model to Transport, Environment, Research and Innovation, Urban Development sectors. The two Modules can be attended in sequence. This is the best solution designed for those who want to be acquainted with both a solid background on the general CBA principles and methods and an applied experience on real life cases.

NOVELTY OF THIS EDITION: This year the school will take place in combination with an international workshop focusing on the role of CBA in government decision-making which is jointly organized by the Society for Benefit-Cost Analysis, University of Milan and CSIL. Participants of the summer school will be offered the opportunity to join this event as part of their training programme.
FACULTY
The School faculty consists of experts from the team involved in the preparation of the new edition of the Guide to Cost Benefit Analysis of Investment Projects, including the authors, technical advisors and academic peer reviewers. All lecturers boast an extensive and hands-on experience in the design, implementation and review of infrastructural projects.

LEARNING METHOD
The training approach is interactive and practice-oriented. The programme combines face-to-face lessons (lectures and presentations, including presentation of examples and case studies), with hands-on workshops. Under the guidance of a tutor, participants will work individually or in small groups on practical exercises (spreadsheets with calculations for Module I and review of real case studies for Module II). Participants are required to have an active participation to the course and are recommended to bring their own laptop with excel installed. The School will make available two PC for each group.

TARGET AUDIENCE
The School targets professionals and practitioners involved in design, preparation, assessment and implementation of investment projects in the framework of EU Cohesion Policy, including desk officers in the European Commission, civil servants (managing authorities, intermediate bodies, etc.) in the Member States and in Candidate Countries, staff of financial institutions and consultants. It may be also beneficial to researchers and practitioners who are willing to learn the at-the-edge international CBA techniques and methods.

No previous exposure is needed to attend Module I. To attend Module II it is required to have an intermediate knowledge of CBA.
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**Participants of Modules I and II are invited to attend the International Workshop on Applied Cost-Benefit Analysis**

**TRANSPORT**

1) Investment priorities, EU strategic framework, project typologies, typical economic benefits

2) Evaluation methods and tools

**ENVIRONMENT**

1) Investment priorities, EU strategic framework, project typologies, typical economic benefits

2) Evaluation methods and tools

**RESEARCH**

1) Investment priorities, EU strategic framework, project typologies, typical economic benefits

2) Evaluation methods and tools

**URBAN DEVELOPMENT & MOBILITY**

1) Investment priorities, EU strategic framework, project typologies, typical economic benefits

2) Evaluation methods and tools

**Parallel Session. Part I**

Presentations of groups’ results and discussion with experts. Part I

**Parallel Session. Part II**

Presentations of groups’ results and discussion with experts. Part II

**Concluding Remarks**

*L* Preliminary Agenda of the workshop is provided in the following page.
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<th>Time</th>
<th>Session</th>
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<td>9:00-9:15</td>
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<td>Massimo Florio (UNIMI)</td>
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<td>9:15-9:45</td>
<td>International Perspective</td>
<td>Lynn Karoly (SBCA)</td>
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| 9:45-10:40| European Perspective                         | - European Commission & European Investment Bank: Witold Willak (DG Regional and Urban Policy) & Davide Sartori (JASPERS – Networking and Competence Centre)  
- European Court of Auditors: Lorenzo Pirelli (Auditor - Chamber 1 Directorate) TBC |
- Word Bank: TBC  
- OECD: TBC  
- World Bank: TBC |
| 11:20-11:35| Coffee Break                                |                                                                                                                                                    |
- Italy: TBC  
- Lithuania: speaker to be indicated (Ministry of Finance)  
- Poland: Dariusz Giziński (Polish Government - CEUTP)  
- Sweden: Henrik Andersson (Toulouse School of Economics) |
| 13:15-13:30| Discussion                                  |                                                                                                                                                    |
| 13:30-14:30| Lunch at Palazzo Greppi                     |                                                                                                                                                    |
| 14:30-16:00| Advances in CBA research: invited papers    | - Environment: Per-Olov Johansson (Stockholm School of Economics)  
- Transport: Gerard de Jong (Significance BV)  
- RDI: Silvia Vignetti (CSIL)  
- Energy Efficiency: Gianni Carbonaro (CSIL) TBC  
- Gas: TBC |
| 16:00-16:15| Coffee break                                |                                                                                                                                                    |
| 16:15-17:30| Advances in CBA research: invited papers    | - Regulatory Analysis: Susan Dudley (SBCA)  
- Government and Risk Mitigation: Scott Farrow (UMBC)  
- Social Return on Investment: Mariana Branco (European Evaluation Society) |
| 17:30-17:50| Discussion                                  |                                                                                                                                                    |
| 17:50-18:00| Concluding Remarks                          |                                                                                                                                                    |
The School faculty consists of experts from the team involved in the preparation of the new edition of the Guide to Cost Benefit Analysis of Investment Projects, including its authors, technical advisors and academic peer reviewers. In particular, the Scientific Director of the School, Professor Massimo Florio, has been involved as author and scientific coordinator of all the five editions of the CBA Guide adopted by the DG Regional and Urban Policy since 1994. All lecturers boast an extensive and hands-on experience in the design, implementation and review of infrastructural projects.

**LECTURERS**

**Massimo Florio.** Professor of Public Economics at the University of Milan, Honorary President and Chairman of the Scientific Committee of CSIL and Board Member of the Society for Benefit-Cost Analysis. He is one of the leading European experts in regional development and evaluation of public policies with extensive knowledge of EU policies. His main research interests are in applied welfare economics, cost-benefit analysis, regional policies, infrastructure and growth, regulation, privatization, public enterprises, socio-economic impact of science. He has lead evaluation research and advisory work for the European Commission (mainly DG Regional and Urban Policy), the European Parliament, the EIB, the OECD, the World Bank and other institutions including recently the CERN for a cost-benefit analysis of future large scale particle accelerators. Since 2011, he has been the Scientific Director of the Milan Summer School. Amongst his recent publications, there is Applied Welfare Economics. Cost-Benefit Analysis of projects and policies, Routledge (2014).

**Ugo Finzi.** Member of the Scientific Committee and Senior Advisor at CSIL. He has more than 45 years of international experience in cost benefit analysis applied to development projects and programs. He holds degrees from Politecnico di Milano (industrial engineering) and from Bocconi University (business administration). He lives in Washington, DC, where he has held several staff and management positions at the World Bank, dealing with a broad range of sectors and regions (Latin America, Eastern Europe, Middle east and Asia). His professional experience covers energy, industry, municipal services, assistance to development of small and medium enterprises, global sector and market studies. He has taught project evaluation worldwide.

**Gianni Carbonaro.** Member of the Scientific Committee of CSIL. Former Head of the Municipal and Regional Unit, Advisory Services Department, European investment Bank (EIB). Research interests and professional experience have covered urban and regional economics, transportation analysis, infrastructure policy, cost-benefit analysis, European transportation networks, housing policy and finance, and the interface between urban development and property markets. At the at the EIB, Mr Carbonaro has worked in multi-professional teams covering the economic and financial assessment of large-scale infrastructure projects (urban transport systems, motorways, railways, toll infrastructure) and urban development, within both the European Union and the partner countries.

**Silvia Vignetti.** Director of the Evaluation Unit at CSIL. She is a CBA expert with experience in training as well as project appraisal. She was part of the team authoring the last three editions of the Guide to Cost-benefit Analysis of Investment Projects prepared on behalf of the DG Regional and Urban Policy, and advised the European Commission by reviewing the application forms of Italian major projects in the transport and environment sector asking for co-financing. She has several training experience in Cost-Benefit Analysis for civil servants and practitioners in Italy and abroad (e.g. Lithuania, Romania, Croatia, Slovenia, FYROM, Ghana). Recently, she has been project coordinator of a research project funded by the EIB Institute and carried out by CSIL in partnership with the University of Milan on developing a CBA model to assess the socio-economic impact in the Research, Development and Innovation sector.

**Gerard de Jong.** Research Professor at the Institute for Transport Studies of the University of Leeds and Director at Significance BV (based in the Netherlands). He did his MSc in Spatial Economics and PhD in Econometrics in 1989. He has been working in transport research ever since. He has worked on many passenger and freight transport models in European countries and on project appraisal and the evaluation of non-monetary effects (e.g. time, travel time reliability, safety) for national authorities and the European Investment Bank. He worked on the EU projects TRACE, EXPEDIT, SUMMA, POET, HEATCO, ETIS, TRANSTOOLS-3 and HIGH-TOOL. He is regularly asked to do peer reviews and audits and has contributed to several guidebooks/handbooks for project appraisal (e.g. in The Netherlands, and for JASPERS). Also he has written various overview articles (including meta-analyses), especially on elasticities, values of travel time and of reliability.

**Davide Sartori.** CBA specialist at the European Investment Bank, JASPERS – Networking and Competence Centre. He is an expert in appraisal of development projects and in financial, economic and risk analysis of infrastructure investments. As former senior Economist at CSIL, he is the lead author of the last edition of the EU Guide to Cost-benefit Analysis of Investment Projects. In the last years, he was appointed by several International Financing Institutions (European Commission, World Bank, European Investment Bank and African Development Bank) to appraise and/or evaluate their projects. He has also been carrying out trainings on cost-benefit analysis targeting officials of the EU, national and regional institutions (e.g. in Italy, Romania, Lithuania, FYROM, etc.), as well as graduate students. On regular basis, he is visiting professor at EIPA, European Institute of Public Administration (Barcelona).

**Jaspers experts in Transport and Environment.** JASPERS is a technical assistance partnership managed by the EIB and co-sponsored by the European Commission (DG Regional and Urban Policy) and the European Bank for Reconstruction and Development (EBRD). JASPERS provides technical expertise for any stage of the project cycle from the early stages of project conception through to the final application for EU funding. JASPERS acted as technical
Gelsomina Catalano. Partner and senior Economist at CSIL and ad joint Professor of Regional Economics and Policy at the University of Milan. She is specialised in financial, economic and risk analyses of infrastructural projects. She has gained training experiences in this field by holding seminars to civil servants in Italy and undergraduates students at the University of Milan, where she is teaching assistant for the course of Public Economics and Workshop on Cost-Benefit Analysis. She carried out ex-post CBA of transport projects in the framework of ex post evaluation of investment projects co-financed by ERDF and CF in the period 1994-99. She has co-authored the last edition of the EC Guide to Cost Benefit Analysis. She contributed to the cost-benefit analysis of the Large Hadron Collider at CERN in the framework of the research programme sponsored by the European Investment Bank Institute. Currently, she is part of the team working on the cost-benefit analysis of the HighLumi and Future Circular Collider projects, carried out by the University of Milan in collaboration with CERN.

Emanuela Sirtori. Partner and senior Economist at CSIL. She has been participating in different evaluation studies of projects, programmes and policies on behalf of the European Investment Bank, the European Parliament and the European Commission. She has gained relevant experience in Cost-Benefit Analysis of infrastructural projects in the transport, environment, energy, education and research sectors. She has been part of the team in charge of drafting the CBA methodological guidelines for the Government of Lithuania and has contributed to the preparation of the last edition of the DG REGIO Guide to Cost-benefit Analysis of Investment Projects. In the framework of the research programme sponsored by the EIB Institute, Emanuela has participated to the development of the new CBA methodology for research, development and innovation infrastructures. She is member of the Steering Committee for the study on the socio-economic impacts of the Future Circular Collider, carried out by the University of Milan in collaboration with CERN.

Chiara Pancotti. Partner and Expert at CSIL. Over the past five years, she has been specializing in the evaluation of development projects and in financial, economic and risk analyses of infrastructure investments, especially in the environmental, cultural and RDI fields. In this context she has gained experience providing technical assistance for the preparation of the cost-benefit analyses and application forms for request of co-financing with ERDF under the 2007-13 Operational Programmes of a number of major projects. She carries out training courses at European level. She has been part of the team in charge of developing the last edition of the DG REGIO Guide as well as drafting the CBA methodological guidelines for the Government of Lithuania. Recently, she has been involved in the cost-benefit analysis of the National Centre for Hadrontherapy (Pavia). Also, she has contributed to Massimo Florio’s recent publication Applied Welfare Economics by authoring the chapter on welfare weights and distributional impacts.

Francesco Giffoni. Expert at CSIL and ad joint Professor of Cost-Benefit Analysis at the University of Milan. He earned a PhD in Economics from La Sapienza University (Rome) with the dissertation "Essays on Human Capital and the Growth of Italian Cities". He has been teaching assistant at the department of Law and Economics at University La Sapienza. He has been a visiting researcher at the department of Regional Economics at Erasmus University of Rotterdam and teaching assistant at the department of Law and Economics at University La Sapienza. His research interests are in public and applied economics, with a specific focus on urban and regional development and industrial policies and policy evaluation. His professional experience started in 2009 at Bank of Italy where he joined a team to evaluate the impact of human capital on the growth of cities. Recently, he has been involved in different evaluation, research and analytical studies on behalf of the European Commission, the EIB, CERN and other international bodies.

Marco Brambilla (PhD in Public Economics) is a senior expert of civil engineering, economics and planning of the transport sector. He gained expertise and skills with regard to the economic appraisal of transport infrastructures, regulation of infrastructures and services, urban economics with equity issues and transport safety. At TRT Trasporti e Territorio, he has been working in multidisciplinary projects in Italian and European working groups and he has been involved in several projects and technical assistance funded by institutions, like DGs of the European Commission (Mobility and Transport, Regional Policy and Research and Innovation) and the European Parliament. As transport economist, he has been involved in quick appraisals of major project applications for transport infrastructure investments and in the preparation of applications for co-funding initiatives under EC’s CEF programme. He also co-authored guidelines on projects evaluation and appraisal on different spatial scales and guidelines for pre-feasibility studies of transport projects. He was appointed lecturer of transport economics and planning at the Politecnico of Milano.

Enrico Bernardis. Director at Tplan consulting srl. Enrico has multi-sector and multi-country experience in transport infrastructure and policy appraisal. He has acted as CBA expert for the review of more than 50 Cost-Benefit Analysis for transport projects in different European Countries (France, Greece, Hungary, Italy, Portugal, Spain, Turkey, United Kingdom) and transport modes (railways, metro and urban transport systems, ports and hinterland connections, road and airports). Enrico has good knowledge of a variety of national and international guidance and tools on economic appraisal for transport, such as the 2014 CBA Guide (EU, DG Regio), Blue Book (EU, Jaspers), and EIB Railpag (EU, EIB), the Notes on the Economic Evaluation of Transport Projects, 2005 (World Bank) and Treasury’s Green Book and WebTAG / Tuba (UK). He has been appointed by INEA as evaluator of the CBA included in the applications for funding under the Connecting Europe Facility.

***

This list will be updated in due course with additional Lecturers (to be confirmed).
 GENERAL INFORMATION

Timetable
- Introduction to principles and methods of CBA (18-20 September)
- Sector Applications of CBA (20-23 September)

School Venue
Palazzo Greppi, Via Sant'Antonio 12, 20100 – Milano
Click here to get local information.

Working language
English

Scientific Director
Prof. Massimo Florio (University of Milan)
Contact person:
Jessica Catalano
Tel. +39 02796630
Email: catalano@csilmilano.com

Fee
The school fees are as follows:
- Module I: EUR 900* (EUR 720 for early birds**)
- Module II: EUR 1,200* (EUR 980 for early birds**)
- Module I and II: EUR 1,750* (EUR 1,390 for early birds**)

* The fee indicated is net of V.A.T (22%). The payment of V.A.T will be checked case by case during the payment phase. Generally, V.A.T is not due if the payer – i.e. the invoice's addressee - is V.A.T exempted (e.g. the European Commission) or has a V.A.T number (reversal charge applicable).
** Application from public sector and universities before May 12th

The fee includes: networking cocktail, participation to the international workshop on CBA (scheduled on September 20th), lunches, coffee breaks, training materials, CD with reading material, certificate of attendance.

Travel and accommodation costs will be at participants' own expenses. The organizing committee will provide support for logistics if needed. Participants are recommended to book their accommodation well in advance since the School overlaps with the Milan Fashion Week.

Conditions for discount
- A 10% discount is offered to institutions applying for more than one participant.
- A 10% discount is offered to participants to previous editions of the school.
- Reduction fee for early birds registrations from public sector/universities submitted before May 12th 2017.
- Discount offered to applicants working at European Institutions.

Conditions for discounts are not cumulative. Only one condition for discount can be indicated in the application form.

Cancellation policy
Payment of the fee is due upon confirmation of the admission to the school. For cancellations of participation until 45 days prior to the course start date, the total fee paid will be refunded. For cancellations until 20 days prior to the course start date, 80% of the fee paid will be refunded. For cancellations until the day prior to the course start date, 40% of the fee paid will be refunded. Not cancelled reservations and no shows will be not refunded (no show bill). All cancellations need to be in writing.

Application
The number of participants is limited to 40 places for each Module. Priority will be given to officials from the public sector or early career and PhD students from universities.

Admission to the School will follow a selection process based on CV evaluation. Applications must be sent on-line (click here to Apply) attaching a CV in EUROPASS format.

Deadline for application is June 16th, 2017

Confirmation of selection will be forwarded to participants along with details of payment modalities. Further details on the course will be provided two weeks before the starting of the school.

Accommodation
Suggestions for suitable accommodations in Milan at special rates will be provided to selected participants, as well as reservation proceedings, should those suggestions be chosen.

Meals
Lunches will be served at Palazzo Greppi and networking cocktail will be at a restaurant in town. Should you require a special menu (e.g. vegetarian, gluten-free), please inform the Contact Person so that this can be arranged.

How to prepare for the school
In order to draw the maximum benefit from the course, participants should possess basic knowledge of economics and/or social sciences. An excellent knowledge of English and of standard office tools, in particular Excel, is required.


Wi-fi will be available in the School venue.