I. Introduction and Context

Country Context
Ukraine is a conflict-affected lower middle income country located in Eastern Europe. In 2014 it had a population of 45 million and a GNI per capita of US$ 3,560 (Atlas method, current US$) -- a decline from US$ 3,760 in 2013 and well below the ECA regional average of US$ 6,892. Despite moderate successes in reducing absolute poverty, average real incomes have stagnated and population has declined by 13 percent since 1991. A series of economic crises have been exacerbated by demographic decline and unstable political environment. More recently, a simmering conflict in the country's east and loss of control over part of its territory contributed to a sharp contraction in GDP (by approximately 12 percent in 2015), as well as spiking inflation and sharp devaluation of the currency.

Political turmoil precipitated by the "Euromaidan" revolution in 2014 has led to a reorientation of Ukraine towards European integration and a rhetoric supportive of wide-reaching social and economic reforms. A reform-minded government has initiated long overdue modernization of a number of sectors with help from the international community. Yet progress on reforms is uneven and impeded by continued political and macroeconomic instability. Nevertheless, the window of opportunity for reform is currently open, as policymakers continue to express willingness to tackle tough challenges faced by their country.

Sectoral and Institutional Context
Ukraine's education sector has long been in need of profound modernization and structural reform. The main challenges include (i) optimization of the school network and efficient use of budget resources, (ii) quality of education and its assessment, and (iii) management of the sector at all
levels using modern evidence-based techniques. With respect to efficiency, the sizable demographic declines that Ukraine has experienced over the past two decades have led to a reduction in the number of children of school age, particularly in rural areas. Yet no commensurate reduction in the number of education institutions has taken place, leading to reduced school and class sizes and increasing unit costs of education provision. With regard to quality, Ukraine does not currently participate in internationally comparable systems of learning assessments, making it difficult to accurately evaluate the quality of education it provides. Despite high rates of secondary school completion and university enrollment, studies show large gaps between the skills possessed by graduates and those demanded by the labor market. Lastly, sector management still relies largely on outdated Soviet-era methods of prescriptive norms and lack of autonomy and accountability.

The latter of these challenges is exacerbated by a lack of tradition of evidence-based policymaking, as well as weak statistical and analytical capacity at all levels of the education system. However, ambitious reforms have been initiated since 2014 to increase autonomy and accountability of local actors. Several pieces of legislation have been introduced to bring Ukraine's education in line with international standards, reform the financing mechanisms within the sector, and decentralize decision making. The government has also committed to Ukraine's first ever participation in the Programme for International Student Assessment (PISA), a triennial measurement of learning among 15 year olds conducted by the Organisation of Economic Co-operation and Development (OECD), starting in 2018. New bodies have been set up to enhance the analytical capacity of the education sector -- including the Institute of Educational Analytics (IEA) under the Ministry of Education and Science (MOES) -- and modernize the statistical practices to inform evidence-based policymaking. The task of modernizing the national information system in Ukraine aims to meet the demand from various governing bodies to improve the collection, processing, and analysis of statistical data in order to obtain a complete picture the functioning of the education sector and enhance its governance and management.

**Relationship to CAS/CPS/CPF**
The current CPS for Ukraine covering FY12-FY16 is set to expire in the coming months. The preparation of a new CPF is expected to begin later this year. Engagement in the education sector was not significantly included in the previous CPS, though it may be covered by the new CPF. As a result, the Bank's engagement in Ukraine's education sector has been stagnant since the closure of the last IBRD loan in 2010. It is now of utmost importance to plan for the re-engagement in the sector through analytical work and technical assistance (e.g., in the form of a Recipient Executed TFSCB Grant).

**II. Project Development Objective(s)**
**Proposed Development Objective(s)**
The development objective of this project is to strengthen the capacity of Ukrainian education authorities to utilize administrative, statistical, and learning assessment data and analytical methods to inform policymaking.

**Key Results**
The key results expected from this project include:

- A single integrated Education Management Information System (EMIS) is developed and fully operational.
- Open data portal is launched to allow all stakeholders to access timely and relevant EMIS data and analysis.
- PISA 2018 is implemented in Ukraine and qualified specialists are trained to prepare the national analytical report during 2019.

### III. Preliminary Description

#### Concept Description

The proposed project will be financed through a Recipient Executed Grant from the Trust Fund for Statistical Capacity Building (TFSCB) over a period of two years (FY17-FY19). The total requested amount for the Grant is US$ 340,000, which will be divided across the following three components:

**Component 1. Development of an integrated Education Management Information System (EMIS)**

The objective of this component is to support the development of a modern EMIS that contributes to evidence-based policymaking and increases transparency of education statistics.

Sub-component 1.1. Integration and quality assurance of existing databases. This sub-component will finance the modernization and upgrading of an existing EMIS that was recently acquired by the Ministry of Education and Science. Previously operated by a private company, the EMIS requires significant quality assurance and integration with existing data systems. Specifically this will require: (i) assessment of the existing data systems; (ii) support from programmers and database developers; (iii) consulting from international and domestic EMIS experts; (iv) knowledge exchange with other countries that have recently established a modern EMIS of their own; and (v) provision of hardware and software necessary to maintain and operate the EMIS.

Sub-component 1.2. Database security certification. This sub-component will finance the necessary database security measures, as required by national legislation. Specifically it will include: (i) development of a Terms of Reference for the services of a firm engaged in database security certification (including assessment of security risks, development of a data protection policy, testing of the security system, and its implementation); and (ii) contracting of such firm to provide the necessary database security services.

Sub-component 1.3. Development of an open data portal. This sub-component will finance the construction of an open data portal that will make timely and relevant EMIS data available to all stakeholders in the education sector. Specifically this will include: (i) contracting programmers and data visualization specialists to develop a user friendly portal linked to the EMIS; (ii) acquisition of statistical, database management, mapping, and data visualization software necessary to run the portal; and (iii) communications and outreach services necessary to inform the various stakeholders about the portal and its uses.

Sub-component 1.4. Training and analytical capacity building. This sub-component will finance a range of capacity building activities to encourage effective use of education statistics, including training on the use of the EMIS and the open data portal developed under sub-components 1.1 and 1.3. Specifically this will include: (i) training of the Institute of Educational Analytics staff in proper
database maintenance and EMIS operation; (ii) training for representatives of local education authorities in proper data entry and submission techniques; (iii) training of other stakeholders and decision makers (including the Ministry of Education and Science, local authorities, and others) in the effective use of education statistics for evidence-based policymaking; (iv) instruction of key stakeholders in statistical and analytical methods that take advantage of data available in the EMIS.

Component 2. Preparation for participation in the Programme for International Student Assessment (PISA)

The objective of this component is to strengthen the capacity of Ukrainian authorities to participate in PISA 2018 and analyze the subsequent assessment results.

Sub-component 2.1. Preparation for PISA implementation. This sub-component will finance selected activities to be undertaken by the Institute of Educational Analytics and other agencies in preparation for PISA 2018 testing. Specifically this will include: (i) data collection and processing for the preparation of the PISA 2018 sample; (ii) preparation of the sample of schools to be included in PISA 2018 piloting and implementation; (iii) knowledge exchange and consulting support with local and international experts on topics relevant to PISA implementation; and (iv) informational activities for teachers and other education system stakeholders regarding international large-scale sample-based student assessments.

Sub-component 2.2. Capacity building for the preparation of the PISA 2018 national report. This sub-component will finance the training of Ukrainian experts in the accepted analytical techniques used in the preparation of PISA national reports based on international best practices. Specifically this will include: (i) training of the staff of Institute of Educational Analytics and other relevant agencies in statistical techniques used for analyzing PISA data; (ii) knowledge exchange with international organizations and other national agencies experienced in preparation of similar reports; (iii) consulting support from local and international experts on relevant topics.

Component 3. Institutional capacity building

The objective of this component is to build institutional capacity of the Institute of Educational Analytics and ensure adequate support for Grant implementation.

Sub-component 3.1. Institutional capacity building. This sub-component will finance the strengthening of institutional capacity of the Institute of Educational Analytics to become the leading education statistics and analysis organization in Ukraine. Specifically this will include: (i) the development of the Institute's website; (ii) training of Institute staff in modern research methods, analytical report preparation, use of statistical software, and English language proficiency; (iii) knowledge exchange activities with domestic and international experts on topics relevant to the Institute's mission; and (iv) provision of a small amount of furniture, hardware, and software. Training of IEA staff on sociological research methods is expected to be provided by the Recipient as part of the in-kind contribution toward the implementation of this Grant.

Sub-component 3.2. Grant implementation support. This sub-component will finance the necessary support for the Institute of Educational Analytics to adequately implement the Grant in line with World Bank rules and procedures. Specifically this will include: (i) consulting services in the areas of procurement, financial management, translation, and others; (ii) operating costs; and (iii) other
expenditures (e.g., training) required by the Project Management Team to successfully implement the Grant. Despite facing severe resource constraints, the Recipient will provide an in-kind contribution in the form of covering administrative costs of the implementing agency (including staff time and operating expenses of the IEA). These are expected to amount to approximately US$ 60,000 over the life of the Grant.

Sub-component 3.3. Audit. This sub-component will finance the required audit of Grant implementation activities.

### IV. Safeguard Policies that Might Apply

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### V. Financing (in USD Million)

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### VI. Contact point

**World Bank**
Contact: Igor Kheyfets
Title: Senior Economist
Tel: 473-4280
Email: ikheyfets@worldbank.org

**Borrower/Client/Recipient**
Name: Ukraine
Contact:
Title:
Tel:
Email:

**Implementing Agencies**
Name: Ministry of Education and Science
VII. For more information contact:
The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop