Technical Cooperation Document

I. Basic Information

▪ Country/Region:	Regional
▪ TC Name:	Policies for local content in Mining Sectors
▪ TC Number:	RG-X1253
▪ Associated Economic Sector Work (ESW) Name:	Knowledge and learning spillovers in mining global value chains
▪ Associated Economic Sector Work ESW Number:	RG-K1396
▪ Taxonomy:	Research and Dissemination
▪ Team Leader/Members:	Carlo Pietrobelli, Team Leader (IFD/CTI); Monica Lugo (LEG/SGO); Claudia Oglialoro (ORP/GCM); Miguel Aldaz (ORP/PTR) Jocelyn Olivari, Elena Guillen and Blanca Torrico (IFD/CTI)
▪ Date of TC Abstract authorization:	N/A
▪ Beneficiary	Brazil, Chile and Peru
▪ Executing Agency:	Inter-American Development Bank, through the Competitiveness and Innovation Division (IFD/CTI)
▪ Donors providing funding:	BHP Billiton
▪ IDB Funding Requested	US$20,000
▪ Local counterpart funding:	N/A
▪ Disbursement period:	12 months
▪ Required start date:	October 1st, 2015
▪ Types of consultants :	Individual consultants
▪ Prepared by Unit:	IFD/CTI
▪ Unit of Disbursement Responsibility:	Institutions for Development Sector (IFD/IFD)
▪ TC Included in Country Strategy: ▪ TC included in CPD:	No No
▪ GCI-9 Sector Priority:	Institutions for growth and social welfare

II. Description of the Associated Economic Sector Work

2.1 This Technical Cooperation Document (TC) relates to the Economic Sector Work (ESW) "Knowledge and learning spillovers in mining value chains" (RG-K1396). The associated ESW aims at understanding how a natural resource based activity like mining can encourage structural change and economic diversification through the inter-firm linkages that characterize Global Value Chains (GVC). The novelty of this research is that it focuses on the mining industry, a sector that has received little attention in the knowledge transfer literature but has a prominent importance in the economic activity of developing countries in Latin-American. The results of the related ESW will contribute to have a better idea on how policy action can help to promote sustainable development in countries that heavily rely on the exploitation of non-renewable natural resources like mining.

2.2 The specific objectives aimed to be accomplished with this ESW are: (i) to understand the governance forms prevailing in the Mining Global Value Chains (MGVC) of selected developing countries and determine the extent to which local suppliers benefit from both knowledge spillovers and learning mechanisms derived from inter-firm linkages (chain leader-supplier linkage); (ii) to identify the factors (market/system failures) within the MGVC that may prevent inter-firm knowledge spillovers and learning mechanism from occurring; and (iii) to determine, from a policy perspective, how inter-firm knowledge spillovers and learning mechanisms within the mining global value chain can be enhanced.

III. OBJECTIVES AND JUSTIFICATION OF THE TC

3.1 Knowledge transfer in a natural resource-based sector like the mining industry may be a key source of productivity growth in developing economies that are specialized in the exploitation and export of mining commodities. However, little is known about how the mining industry can encourage structural change and economic diversification through the inter-firm linkages that characterize GVC. In general terms, the GVC approach is aimed at "explaining industrial development and innovation in developing countries in the context of increased globalization and transnational inter-firm linkages" (Morrison et al., 2008). It focuses explicitly on the nature of the relationships among the various actors involved in the chain, stressing the role that chain leaders may play in supporting developing countries producers' learning and innovation activities, and explores their implication for development. In practical terms, the upgrading of suppliers derived from inter-firm linkages within the GVC does not imply necessarily to climb up the value chain, but to deepen the capabilities within the same functions or in additional functions along the value chain. This can have a substantial impact in their innovation propensity and intensity, and in their subsequent productivity levels.

3.2 Studying GVC applied to the mining industry is interesting since it can help understand how productivity growth and structural change can be encouraged by exploiting the comparative advantage of countries rich in natural resources, some of which are currently at the technological frontier and are dominant players in the global market. This is the case of local suppliers in Chile for example, where a new set of advanced service and intermediate goods suppliers has developed by benefiting from the linkages with lead firms (OECD, 2013). At the same time, the increasing demand for minerals driven by the growth of emerging economies is expected to remain high during the next decade (OECD, 2013), which implies that the window of opportunity will remain open for some time. This means that there is still time to take advantage of the favorable current international context and encourage structural change and diversification through the promotion of fruitful inter-firm linkages within MGVCs.

3.3 The ongoing ESW RG-K1396 will contribute to generate new knowledge about the role that natural resources play in fostering productivity growth and economic development by providing empirical evidence on how knowledge transfer, learning and innovation takes place within the mining sector in three Latin American countries: Brazil, Chile and Peru. From this study policy implications can be inferred, which need to be traduced and systematized in a set of policy recommendations that can help shaping the way local productive development is being supported in mining economies in general. The proposed TC will therefore capitalize in the knowledge produced by the ESW, and based on the experience of Brazil, Chile and Peru will propose a set of policy implications that apply in general to mining economies in the LAC region.

3.4 To accomplish the above, this Technical Cooperation will support to carry out and finance the knowledge and dissemination product “Knowledge and learning spillovers in mining value chains: **Policy Implications for LAC**”. Apart from producing this knowledge product containing a set of policy recommendations for mining economies in the LAC region, this TC will help to finance a workshop, where the main results of the case studies of Brazil, Chile and Peru will be presented. This workshop will be a key input to produce a set of policy implications for these three countries in particular, but will also allow drawing more general implications that apply to mining economies in the LAC region.

IV. DESCRIPTION OF ACTIVITIES/COMPONENTS AND BUDGET

4.1 **Activity 1:** One final workshop to be held in Washington DC in October 2015, to discuss the results produced by the case studies of Brazil, Chile and Peru. This workshop will be attended by the consultants involved in the three case studies, invited experts from the mining sector, like representatives of Fundación Chile, and people from the IDB working on related topics (for example the operation BR-L1419 on competitive mining). The interaction between the attendees will allow developing joint conclusions that can help defining a set of policy implications for mining intensive countries in the Latin America and the Caribbean region.

4.2 **Activity 2:** A peer reviewed report on the papers and workshops produced within the present project. For this, an external expert will be hired with the aim of reviewing the case study reports, provide feedback to the consultants in the workshop and summarize the main findings of the three studies. This will allow developing a set of conclusions and policy implications contained in the report “Knowledge and learning spillovers in mining value chains: Policy Implications for Latin America and the Caribbean”.

4.3 Funding to execute this TC will be provided by BHP Billiton, an Anglo-Australian multinational mining, metals and petroleum company with headquarters in Melbourne, Australia. The company has presence in 26 countries and employs more than 128 thousand people. It is organized in five business units, one of them being the Copper division located in Chile, where it operates two mines: Minera Escondida and BHP Billiton Pampa Norte. In 2008 the company created the World Class Supplier Program (PPCM) with the aim of strengthening the linkages with suppliers that could tackle specific needs and challenges faced by the company and the mining sector in general. The idea of the program also motivated Codelco, the main Chilean public mining company, and Fundación Chile to join the program. The PPCM initiative is an example of BHP Billiton’s commitment to promote the development of the supplier sector in Chile. Since this TC is aimed at producing a summary of recommendations on how to enhance the relationship between lead firms and suppliers in mining global value chains, BHP Billiton showed interest to support an initiative that goes in line with their interest of strengthening the supplier sector in the mining industry.

Table 1. Indicative Results Matrix

Indicators	Measurement Unit	Baseline		Goal		Source of Verification
		Value	Year	Value	Year	
Result 1: # of times knowledge produced has been used for policy advice						
Output 1: Workshop organized	#	0	2015	1	2016	Workshop agenda
Output 2: Peer reviewed report on the papers and workshop	#	0	2015	1	2016	Report
Result 2: # of times knowledge produces has been used for operations						
Output 1: Workshop organized	#	0	2015	1	2016	Workshop agenda
Output 2: Peer reviewed report on the papers and workshop	#	0	2015	1	2016	Report

4.4 BHP Billiton expects to commit US$20,000 to this project. The total amount of financing received by BHP Billiton will be allocated as shown in the table below:

Table 2. Indicative Buget (US$)

Activity/Component	IDB/PSG Funding
Peer reviewed report	10,000
Final Workshop	9,000
Fee 5%	1,000
Total	**20,000**

4.5 Resources of this project to be received from BHP Billiton will be provided to the Bank through a Project Specific Grant (PSG). A PSG is administered by the Bank according to the "Report on COFABS, Ad-Hocs and CLFGS and a Proposal to Unify Them as Project Specific Grants (PSGs)" (Document SC-114-1). As contemplated in these procedures, the commitment from BHP Billiton will be established through a separate administrative arrangement (the "Administrative Arrangement"). Under such arrangement, the resources for this project will be administered by the Bank and the Bank will charge an administrative fee of 5% of the contribution, which is duly identified in the budget of this project. The 5% administrative fee will be charged after the contribution had been received.

V. EXECUTING AGENCY AND EXECUTION STRUCTURE

5.1 The Bank through the Competitiveness and Innovation Division (IFD/CTI) will be responsible for the direction, supervision and coordination of this TC. Given the experience of IFD/CTI in the topics included in this TC, this unit will be responsible for the procurement and supervision of the products included in this TC. For the implementation of the project, and in case any of the activities needs to be carried out in any of the Beneficiary countries, the project team will obtain the corresponding non-objection letter from the official entity that represents the country, prior to the initiation of the activities.

5.2 The Bank will contract individual consultants, consulting firms and non-consulting services in accordance with Bank's current procurement policies and procedures.

5.3 The project team will be responsible for the preparation and submission to the donor of the project reporting in compliance with the stipulation of the Administration Agreement .

5.4 If at the end of project execution the project was closed with a positive uncommitted and unspent balance, the project team will be responsible for informing ORP/GCM to transfer the unspent balance as agreed to by the donor and the Bank pursuant to the terms of the PSG Administration Agreement.

VI. MAJOR ISSUES

6.1 There are no major risks associated with the implementation of this TC.

VII. EXCEPTIONS TO BANK POLICY

7.1 No exceptions were identified.

VIII. ENVIRONMENTAL AND SOCIAL STRATEGY

8.1 Given the nature of the program, there are no associated environmental or social risks. Based on the Environment and Safeguards Compliance Policy (OP-703) this operation is classified as "C." (See Safeguards Policy Filter Report and the Screening Form).

Required Annexes:

- Annex I - Terms of Reference.
- Annex II - Procurement Plan.

APPROVED:

Orginal Signed *9/17/15*

Jose Miguel Benavente
Division Chief, IFD/CTI

Date