



—
INSTITUT DE HAUTES
ÉTUDES INTERNATIONALES
ET DU DÉVELOPPEMENT
GRADUATE INSTITUTE
OF INTERNATIONAL AND
DEVELOPMENT STUDIES

CONTRACT
For the provision of services
between

The « Fondation pour l'institut de hautes études internationales et du développement »
(Foundation for the Graduate Institute of International and Development Studies)
CP. 1672 – 1211 Genève 1 – SWITZERLAND/SUISSE
Hereafter IHEID

And

Mr Jaromír BENEŠ
Sáňkařská 362, Liberec, 460 08; CZECH REPUBLIC/ČESKÁ REPUBLIKA
Hereafter the Subscriber

1. OBJECT OF THE PRESENT CONTRACT

The object of the contract is to provide technical assistance, both theoretical and practical, to the **Banco de la República of Colombia** (BanRep). The assistance includes on-boarding, preparation time and remote support on *Advanced IRIS Tools for Macroeconomic Modelling*.

Detailed tasks are contained in the Terms of Reference of the present contract, which makes its integral part.

This contract is signed as part of the Bilateral Assistance and Capacity Building Program for Central Banks (BCC) funded by the Swiss State Secretariat for Economic Affairs (SECO).

2. DURATION OF THE CONTRACT

The Subscriber undertakes this contract for the period 1 August-30 September 2021, for a total of 10 days of work, whose exact dates will be determined by the Subscriber and the BanRep.

3. EXPENSES

IHEID will pay total honorarium of CHF 8'000.-, including VAT. The engagement of the Subscriber includes 3 days of pre-mission work and 7 days of remote support, totalling 10 days, to assist the BanRep.

Payment will be made upon satisfactory completion of the assignment, presentation of original receipts, and reception of a satisfactory mission report as detailed in the terms of reference.

4. GENERAL CONDITIONS

The Subscriber will at all times preserve the interest of the project. They will not engage in any activity detrimental to the project that is the object of the present contract.

The Program Manager of BCC has the right at any time of their choosing to inquire or to check on the activities linked to the project.

The Subscriber will inform the Program Manager of BCC without delay, through the appropriate means, of any event that could hinder the smooth running of the project or put its successful completion into jeopardy.

The following confidentiality clause applies: all documents, information and data that will come to the knowledge of the Subscriber in the course of the execution of the present contract are confidential and may not be used under any circumstances.

Infringement of the present disposition could lead to the cancellation of the present contract and to prosecution.

5. LEGAL FORUM

This contract is subject to Swiss law. The legal forum is in Geneva.

For IHEID
Place and date:

Tamara Pironnet
Executive Director

Claudia Saviaux Druliolle
HR Director

Bruno Chatagnat
Administrative Director

Place and date:

Liberec – May 31, 2021



Jaromír BENEŠ

TERMS OF REFERENCE FOR EXPERT MISSIONS

Activity: Advanced IRIS Tools for Macroeconomic Modelling (remote support) at the Banco de la República of Colombia (BanRep)
Total support period: 1 August-30 September 2021
In-person mission dates: N/A
Estimated total effort (onsite and remote): 10 days (3 days pre-mission, 7 days remote support)
Expert proposed: Mr Jaromír Beneš
<p>Content: The expert will help BanRep staff acquire knowledge of IRIS tool to:</p> <ul style="list-style-type: none"> • Incorporate non-linearities (e.g. for fiscal policy and the endogenous risk premium) in semi-structural models; • Include non-stationarities (e.g. for a balanced growth path with different growth rates for consumption and investment) in dynamic stochastic general equilibrium (DSGE) models; and • (if time allows) Perform system prior analysis to estimate model parameters. <p>The expert will highlight the assumptions, strengths and limitations of each modelling tool, while discussing potential challenges in adapting them to Colombian data. If a second IMF expert participates in the mission, the experts can agree to divide the aforementioned tasks between themselves.</p>
Objective of the support: To acquire advanced IRIS tools to model non-linearities and non-stationarities in macroeconomic models, as well as conduct system prior analysis to estimate parameters
Relevant logframe outcome: The BanRep has up-to-date models that contribute to monetary policy
Output: The BanRep has an improved macroeconomic modelling framework for policy analysis
Working Format: Remote support
Beneficiaries: BanRep – <i>Departamento de Modelos Macroeconómicos</i>
<p>Background: The BanRep performs medium-term macroeconomic forecasting, policy analysis, monetary policy recommendations and the construction of macro risk scenarios using two models:</p> <ul style="list-style-type: none"> • The PATACON – a small open economy DSGE model for the Colombian economy (implemented on DYNARE); and • The 4GM is a semi-structural model for an oil-exporting small open economy (implemented on IRIS). <p>Currently, the BanRep staff are revising their models as follows:</p> <ul style="list-style-type: none"> • Developing four new sections to improve the 4GM: fiscal policy, endogenous risk premium, labor market and the term-structure of interest rates. They would like to use IRIS tools to incorporate non-linearities at the fiscal policy and endogenous risk premium components of the 4GM, especially to reflect that the risk premium is a nonlinear function of the public debt stock. • Adjusting current features of the PATACON: they would like to use IRIS tools to apply different growth rates for variables such as consumption and investment for the “<i>balance growth path</i>”. • Re-estimating their macroeconomic model parameters using Bayesian techniques (e.g. sequential Monte Carlo methods). Building on previous BCC support in 2020, they would like to use DYNARE or IRIS to perform system prior analysis and thereby set priors for selected features of the impulse response functions and variance decompositions. This will allow them to condition their models to analyse the response of Colombian macroeconomic variables to different shocks. <p>This mission will take place as remote support (i.e. virtual format), owing to the restrictions in place due to the COVID-19 outbreak. However, the BanRep and BCC agree that additional support – remote or onsite – may be necessary to complete this project.</p>
How experts contribute to BCC’s mission

Technical assistance is partly provided through experts. The experts bring expertise across the 6 areas in scope. It is important that there is continuity in the technical assistance provided to countries, particularly if provided by different experts. Therefore most experts will be engaged in the following:

- *On-boarding and preparation:* **The experts' roles go beyond the specific terms of references for each mission.** They are important enablers of the process, and thus, it is essential that they fully grasp the importance of their role. To bring the experts on board and help them understand how their work fits in the broader programme, BCC will share the relevant needs assessment and programme of work reports, and have regular pre-, during- and post mission check-ins.
- *In country mission:* **Most technical assistance will include some element of in-country support.** In country missions will help the expert fully understand the context, tailor the technical assistance to the specific circumstances, and develop relationships with staff (which is important for effective remote support).
- *Remote support:* **Technical Assistance has to be practically relevant and over time.** It is highly likely that technical assistance will combine theory with practical support. The in-country missions will most likely serve to share most of the theoretical support. Experts should also use the missions to provide some practical support. However, practical needs often emerge over time, as staff develop and test the new tools and processes. Technical experts therefore have to provide regular remote support for several months after the technical assistance missions.
- *Transition:* **BCC will balance the continuity of experts with the need for specific expertise.** Wherever possible, BCC will engage the same expert to provide technical support within an area of work in a country, thus promoting continuity of support. This might, however, not always be possible or beneficial. For example, some experts might not be sufficiently available or there might be a need to bring in different, highly specialised experts. All experts will be expected to produce a report that summarises the work done and results achieved (see section 5) and collaborate with the BCC programme manager to effectively transition the work to the next expert. This might, for example, be by participating in an on boarding call with the next expert, and answering questions the new expert has during his/her implementation.

A focus on practical and sustainable results

Technical assistance should have a focus on practicality and aim for sustainable results. Technical assistance will combine various elements to promote the practicality of the capacity built. It is therefore highly likely that most technical assistance will include a combination of theoretical courses and practical support (in person and remote). In addition, the capacity built has to be sustainable and transcend the staff directly engaged. Most technical assistance will therefore include elements that build sustainable capacity such as train the trainer modules, learning notes, guidelines, etc.

To ensure that the technical assistance providers understand these needs and adequately address them, the BCC programme manager will engage in planning conversations before the technical assistance starts. During these conversations, the BCC programme manager will **discuss the expert's suggested approach and activities and, where necessary, request that more practical and engaging activities are planned.** The BCC programme manager might give suggestions on such possible activities (these might include, for example: practical exercises, round-tables, peer-to-peer activities within teams, or sessions that are led by staff). The BCC programme manager will also request feedback from the central bank on the nature of the technical assistance, to course correct as necessary.

Communication with BCC

Each module of technical assistance will be monitored and assessed. To allow for appropriate monitoring, the BCC programme manager will engage with the expert and central bank before, during and after the support.

- **Pre-support:**
 - **Before the formal start of the support, BCC will create Terms of Reference** with key details and concrete objectives for the mission; these will be shared with the central bank, the expert, SECO and the Swiss Cooperation Office in the country (SCO).

- **One-to-one on-boarding call with expert (including the previous expert, if needed).** All technical assistance modules (often including in-person mission and follow-up remote support) will kick off with a call between the BCC programme manager and the expert. This will serve to discuss the programme of work and how the activity will help contribute to the targets, the TOR, previous experiences with the central bank, and the expert's reporting responsibilities
- **One-to-one preparation call with the central bank activity focal point.** The BCC programme manager will have a preparation call with the central bank activity focal point (who might be the manager or head of the team that will benefit from the assistance). The call will serve to discuss how the upcoming technical assistance fits in the programme of work and will help contribute to the targets; to receive insights/updates; and to explain the participant's reporting/feedback responsibilities. The discussion will lead to the formalisation of Terms of References.
- **Trilateral call** between the BCC programme manager, the activity focal point at Central Bank and the expert. The call will serve for the participants to formally be introduced and to agree on objectives and final logistics.
- **During remote support:**
 - **Regular one-to-one check-in calls with the expert.** The BCC programme manager will have regular (e.g., monthly) check-in calls with the expert to discuss progress on the remote support.
 - **Regular one-to-one check-in calls with the central bank activity focal point.** The BCC programme manager will have regular (e.g., monthly) check-in calls with the central bank activity focal point to discuss progress, satisfaction and usefulness of the remote support.
 - **Survey to participants.** Within the 2-3 months after the remote support, BCC will launch a short survey to the participants who benefitted/are benefiting from the technical assistance. This survey will be launched online, be anonymous, and include components on: the expert, the in-person technical assistance, and the remote support. Questions will focus on the usefulness of the support (i.e., how are they using the learnings/support). Responses will be analysed in aggregate and inform future planning. The use of surveys will require that central banks share the email addresses of participants with BCC.
- **Post support:**
 - **Post-mission report.** At the end of the remote support, the expert will draft a post-mission report using the predefined template. The report will include relevant elements that allow the BCC programme manager to track progress against the logframe, where possible. The report should be shared with the BCC programme manager within 4 weeks of the completion of remote support.
 - **One-to-one debrief call with expert.** The BCC programme manager will have a debriefing call with the expert to discuss the final report and the expert's experience and observations in more detail.
 - **One-to-one debrief call with the central bank activity focal point.** The BCC programme manager will have a debriefing call with the central bank activity focal point to receive feedback on the technical support received.

Reporting

Expert mission reports will be submitted to IHEID within four weeks after the remote support mission has taken place. Expert mission reports should include: i) a short summary of mission results, ii) general impression of the mission, iii) mission results, iv) key challenges, lessons learnt and risks; v) other relevant insights (e.g., other parallel initiatives) vi) next steps/ follow-up, vii) annexes (final mission programme; feedback received, etc.). Please refer to Export Post-Mission Report document for a template. Expert mission reports will be shared with SECO and SCOs upon request.