Territorial Impact Assessment for Cross-Border Cooperation

Targeted Analysis

CBC TIA Handbook

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1 Introduction

This document represents the guidance on how to conduct an ex post CBC TIA (Cross-border cooperation programme territorial impact assessment). It bases on a methodology which has been developed during the ESPON TIA CBC project. The purpose of this document is to give guidance on the methodology to experts who wish to conduct an ex post CBC TIA as well as for CBC programme specialists who would like to prepare a tendering procedure for a CBC TIA and get an understanding of the steps and the methodology. For this purpose, the Scientific Annex of the ESPON TIA CBC project¹ provides further guidance on tendering including model ToR. It provides detailed instructions on each working step, as well as supplements necessary tools such as a list of common CBC indicators to be used in the TIA (annex 1), guidance on mapping as well as templates for intermediate and final reports.

The purpose of an ex post CBC TIA is to provide an overview of the territorial impact of a CBC programme. Experts conducting a TIA should bear in mind that impact assessment is not the same as an evaluation. A TIA is “normatively blind”; it does not provide a judgement on whether or not a programme has reached its goals or whether the impacts observed are “good” or “bad”. The goal of a TIA is to capture the impacts, including those not intended by the programme. This can contribute to an evaluation, but does not constitute an evaluation itself.

1.1 Overview of activities to be conducted in an ex post CBC TIA

Conducting a CBC TIA consists of different types of activities which are ordered to support subsequent steps as well as the overall purpose of the project. The activities involve a range of different methods which the handbook will present in more detail. An overview of the activities is presented in the table below.

*Table 1.1: Activities in the TIA*

<table>
<thead>
<tr>
<th>Activities</th>
<th>Reference section in this handbook</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1. Analysis of the framework of the CBC programme, first proposal of indicators for a TIA</td>
<td>2.1</td>
</tr>
<tr>
<td>A2. Conducting a workshop in the region developing intervention logic and indicators</td>
<td>2.2</td>
</tr>
<tr>
<td>A3. Populating indicators selected with data</td>
<td>2.3</td>
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<td>A4. Conducting a workshop to establish impact for non-quantitative indicators</td>
<td>2.4</td>
</tr>
<tr>
<td>A5. Writing of the TIA report</td>
<td>0</td>
</tr>
</tbody>
</table>

¹ To be found under https://www.espon.eu/TIA-CBC
1.2 Accompanying Documents

The handbook is accompanied by multiple excel- and word templates, all of which aim to streamline the process as well as the reporting on the TIA. All templates should be used for the process, given that they are an element of the methodology and enable a full application of the ESPON ex post CBC TIA. In addition, the standardized approach to TIAs enables comparisons among different TIAs.

For each template, the document name (for documents provided separately) as well as the section where an explanation on how to use the document is provided in the table below.

**Table 1.2: Attached documents & annexes**

<table>
<thead>
<tr>
<th>Document</th>
<th>Corresponding Section</th>
<th>Document Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common CBC indicators list</td>
<td>Annex 1</td>
<td>-</td>
</tr>
<tr>
<td>Intervention Logic Tool</td>
<td>Annex 2</td>
<td>TIA_CBC_intervention_logic_tool.xlsx</td>
</tr>
<tr>
<td>Data assessment template</td>
<td>Annex 3</td>
<td>TIA_CBC_data_assessment.xlsx</td>
</tr>
<tr>
<td>Impact Assessment Matrix</td>
<td>Annex 4</td>
<td>TIA_CBC_Impact_Assessment_Matrix.xlsx</td>
</tr>
<tr>
<td>Calculation methods</td>
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<td>Data production methods</td>
<td>Annex 6</td>
<td>-</td>
</tr>
<tr>
<td>Programme Characterisation Report template</td>
<td>External document</td>
<td>TIA_CBC_Programme_Characterisation_Report.docx</td>
</tr>
<tr>
<td>Final Report Template</td>
<td>External document</td>
<td>TIA_CBC_Territorial_Impact_Assessment_Report_30.docx</td>
</tr>
</tbody>
</table>
2 Conducting the TIA

As indicated above, conducting an ex-post TIA for a CBC programme follows five concrete working steps. The figure below gives an outline of the process.

Figure 2.1: TIA CBC working steps

While working through the steps, experts should keep a close contact with programme authorities, as a lot of regional knowledge will be available there. Note, that when "(relevant) programme authorities" are mentioned as a contact point throughout the handbook, this could be the MA, the JS or the regional offices depending on the case. As this structure of responsibilities varies from programme to programme, we advise experts to consult with their stakeholder contacts on this issue. They will be able to provide experts with a contact point for programme information according to the specific responsibilities. Especially when working with CBC programmes, a lot of "special" knowledge and data requirements will surface, that are not encountered in other programmes. The programme authorities will also be the source for all of the programme documents (if not publicly available on their website), of which at least the following are needed:

- Latest version of the Cooperation Programme document
- All Annual Implementation Reports
- Programme Manual
- Ex-ante evaluation report
- Any other internal documents the programme authorities can provide, especially regarding indicator assessments

Preparation of the TIA

Before starting the actual Territorial Impact Assessment (TIA) process it is necessary to define the objectives and knowledge needs of the programme authorities. What do they want to achieve with the TIA, what is the intended result? Where in the programming cycle is the exercise placed?
Additionally, it is crucial to examine, if the time plan is realistic and coincides with data availabilities on any indicator set out by the programme. It has to be verified, if the data collection schedule as set out by the OP is still correct and the data will be available for conducting the TIA. If that is not the case and primary data collection has to be conducted, a schedule in consultation with the programme authorities has to be set up.

**Scope of the TIA**
Before starting the TIA process, it is crucial to define the scope with the programme authorities. A TIA can be conducted for a programme as a whole, it can be limited geographically (i.e. only conducted for a sub-area of the programme area) and it can be thematically limited (i.e. only conducted for certain policy fields). As the size and heterogeneity of programme area covered and the thematic spread of the programme has implications for conducting workshops throughout the process, it has to be defined beforehand, what will be covered. This depends on the needs of programme authorities and ultimately will be decided by them.

### 2.1 Step 1 – Programme characterisation (A1)

The goal of this step is to get a clear picture of both the programme framework and the programme area. The result constitutes the *Programme Characterisation Report* (see Table 1.2), which will be used both for backstopping with the project team as well as acting as an input document for workshop participants in step 2.

The programme and the programme area as well as the data situation for potential indicators. TIA service providers are to conduct a structured analysis of all relevant programme documents, consult with the programme authorities as well as conduct additional desk research regarding both data sources for indicators as well as general background information. All findings are then to be summarized in a programme characterisation report, a template for which is provided in the scientific annex, chapter 10. The report is to be provided to all workshop participants in Step 2, in order to familiarize them with the overview findings. The elements of the report include:

- Characterisation of the programme area
- Identification and depiction of context data
- Characterisation of the programme framework
- Reconstruction of the intervention logic
- Identification of indicators
- Assessment of data availability and data gaps

The individual elements are not to be seen as one-after-the-other steps, but should be elaborated in parallel, as these elements are interdependent. For example, in order to know which context data is relevant for the programme area characterisation, it is necessary to know already which thematic fields are targeted by the programme.
Characterisation of the programme area, context maps

The characterisation of the programme area incorporates the basic information necessary for an understanding of programme impact. This includes e.g. socio-demographic context data such as population and population density, age structure (status quo and development) as well as economic data such as shares of the economic sectors, income distribution, main fields of employment. As the territorial distribution of impacts is crucial in a TIA, this characterisation has to aim at identifying regional differences on the lowest feasible level, which will aid in subsequent working steps. Accordingly, spatial characteristics such as economic or population nodes should be identified. In order to avoid producing excess amounts of data of little use for the task at hand, it has to be carefully considered what should be included in such a characterisation and what not. TIA service providers should pay special attention to major or region defining characteristics, e.g. unusually high share of people above 65, outstanding shares of single economic sectors/employment fields or major disparities between regions. The goal is not to get an in-detail analysis of every aspect of a programme area, but an overview on the defining properties and their regional distributions. Indications can be taken (partly) from the programme documents itself, as those already include a section on regional characteristics. In the course of the characterisation, important context data for regionalizing programme effects has to be identified and can be translated into maps. Possible maps include regional typologies (urban/intermediate/rural, mountainous, coastal ...), income data, employment data, migration data etc. The choice has to be made along the question if the indicator is necessary and useful when identifying and regionalizing relevant programme effects. An example for such a context map depicting the regional disparities in GDP/capita ranging from €25,000 to €48,000 in the AT-IT CBC area is shown above.

Possible maps include regional typologies (urban/intermediate/rural, mountainous, coastal ...), income data, employment data, migration data etc. The choice has to be made along the question, if the indicator is necessary and useful when identifying and regionalizing relevant programme effects. Context data showing intra-programme area disparities which will be used for regionalizing effects (see 2.4.1) has to be depicted in maps as shown in Figure 2.2.
Those maps will be used for giving workshop participants in step 2 and step 4 an indication of the regional background, painting the scene for territorial differentiation against various characteristics.

Sources: Cooperation Programme, National/Regional Statistical Offices, Literature on the Region

Characterisation of the programme framework

The characterisation of the programme framework is the most important basis for reconstructing the intervention logic. As the programme framework changes over several programming periods (such as supporting the same beneficiaries or in general taking the same measures) effects cannot be assessed over multiple periods. Sources to be considered are the cooperation programme (OP) document, all Annual Implementation Reports (in full, not only as a citizens summary), the programme manual, the KEEP database\(^2\) by Interact, as well as any additional documents the programme authorities can provide and are deemed helpful here.

As a first step, the logical structure of the programme has to be examined. What goals are set by the programme? Which Priority Axes (PAs) are defined? Which Thematic Objectives (TOs) and corresponding Investment Priorities (IPs) are selected? What are the Specific Objectives (SOs) for each IP? How much funding is allocated towards each IP? Additionally, for each SO, details such as the justification for selecting it, the results expected by the programme and the actions and beneficiaries supported have to be depicted, as those are of high importance for reconstructing the intervention logic. The programme characterisation report template provides a clear structure for summarizing that information, however in future pro-

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\(^2\) [https://www.keep.eu/keep/](https://www.keep.eu/keep/)
programming periods it has to be adapted to the structural changes in programming frameworks (such as the change from Thematic Objectives to Policy Objectives).

All relevant information can be found in the OP. Data on actual spending, outputs and results achieved (as measured by the corresponding programme indicators) are available through the AIR or have to be provided by the programme authorities through the electronic monitoring system. Based on that data, additional maps depicting the regional financial allocations by intervention field and thus indicating the regional and thematic distribution of programme spending as a background information for the workshops in step 2 and 4 have to be produced. It is advised to produce them at the finest territorial granulation for which the underlying data is available, which in most programmes should be NUTS 3.

Furthermore, the continuity of the programme framework has to be questioned. This point can be tackled consulting the MA or other regional authorities. It refers to identification of any major breaks and changes in the programme area during the programme period, which might interfere with the roll out of the programme as planned. If such changes are identified, those will have to be considered when identifying probable programme effects. For example: the improvement of travelling conditions for cross-border workers is a declared objective, however during the programming period, diverting from a beforehand freely crossable “Schengen-Border”, one of the countries involved re-instates border control measures, the positive effect of the programme will be small to undetectable against the overlying negative effect of border-controls.

Sources: Cooperation Programme, Annual Implementation Reports

Reconstruction of the intervention logic

The intervention logic is the essential basis for any impacts to be identified, thus has to incorporate all relevant elements of the programme. It follows a 4 step logic chain: needs – measures – effects – indicators and should be structured along the Specific Objectives (SOs).

An example of such an intervention logic element for one specific objective is depicted below. In building those intervention logic elements, the programme documents have to be consulted.

It is important to pay attention to the following:

- The needs on which an intervention is based are clearly outlined for each SO, as a justification for its selection has to be given in the programme itself.

- For each SO, the supported measures addressing these needs have to be extracted. Again, these can be identified based on the programme documents and AIRs, where supported actions and beneficiaries are described. Additionally, the programme monitoring system could be consulted for additional information (such as the types beneficiaries) as information recorded there might supplement information in the AIR and OP. Those will have to be summarized into generalized “measure groups” by the TIA service provider, which describe the activities under a specific SO in an abstract way. Depending on the structure and the scope of the TIA it is advised to aggregate actions to a maximum of 3-4 measures group per SO, as otherwise the corresponding effects and indicators will be too numerous to handle in the further process.
• For each of those “measure groups” the expected effect(s) on the programme area have to be identified and formulated. In order to establish clear, well-justified link for each effect, both the measures themselves as well as the expenditure foreseen and other context data should be taken into consideration. The focus of these effects should take into account the cross-border aspects in particular if that is relevant to the programme—e.g. when formulating an effect on industry innovation, “increased cooperation of companies across borders” is a more fitting effect than “increased in-house innovation potential of companies”. It should however be kept in mind, that not all programmes focus on the cross-border effects in all instances. The goal is not to identify every imaginable effect, but to concentrate on the main ones in line with programme expectations, also keeping in mind measurability and effort necessary for the further TIA process. As the number of indicators used to measure these effects should (for reasons of practicability) not exceed 15-20, this also limits the number of relevant effects to be identified. However, as the preliminary intervention logics are subject to expert discussion and verification in the first workshop (step 2), it is preferable to include more possible effects at this stage and narrow down the numbers later in the process. Keep in mind that not any effect however likely or unlikely has to be identified, but just the main effects – the financial allocation towards the measures can be used as a hint here.

Figure 2.3: Intervention logic example
SO 5: Increase travel by cross-border public transport (TO7, PA4) and SO 6: Increase cross-border mobility with a focus on low-carbon transportation (TO7, PA4)

Please make use of the Intervention Logic Tool (Annex 2) to track the process for the next substep as well. All intervention logic elements will be subject to verification in working step 2.

In some cases, the number of SOs and thus intervention logic elements will be larger, which might cause a problem in the further TIA process. If this is the case for the investigated programme, consider the possibility of reducing the number of SOs to a feasible number. Around 5 SOs are manageable within a workshop setting (considering that each thematic field has to be covered by the respective experts to be invited as described in section 2.2). If the number exceeds 5, it might still be manageable as long as they are situated in the same thematic area (such as two rather similar objectives under the same thematic objective ), which will have to be decided in cooperation with stakeholder contacts. If SOs have to be dropped however, at first
experts should consider the financial allocations. If for one SO an amount considerably lower than for the other SOs is allocated, the decision could be made along this rationale.

An alternative is to split the expert workshop to be conducted in working step 2 in several workshops along thematic lines. In this case, only a manageable number of SOs is covered in each workshop, enabling experts to invite a knowledgeable expert panel for the relevant thematic fields.

Sources: Cooperation Programme, Annual Implementation Reports, scientific literature

Identification of indicators

Indicators will be used to depict the programme impact for the identified probable effects. To that end, each effect should be covered with at least one indicator. Keep in mind that the number of indicators manageable in the course of the TIA should be around 15 – so while indicator numbers can be reduced in the process, it would not make sense to exceed this number by far. Indicators fall in three types of groups:

- Programme indicators (Result indicators depicting impacts, additionally output indicators possibly to be used for regionalization efforts as a proxy – those cannot be used for depicting impacts directly)
- Common CBC indicators (Provided in annex 1, common across various CBC areas and therefore ensuring comparability)
- Additional indicators (derived neither from the programme nor the handbook, but necessary to accurately depict programme impact).

As a first step, the relevance of programme result indicators (R) for the identified effects has to be taken into account. If a logical link can be established, programme result indicators are advisable to select as they will have underlying data provided by the programme itself available. However, not always do programme indicators accurately depict the identified effects – in such cases, they should not be included in the indicator selection.

As a second step, the list of common CBC indicators (C) provided by the handbook should be consulted. These indicators are arranged in three groups corresponding to the three general principles of CBC programmes as applied by the Institute for Transnational and Euregional cross-border cooperation and Mobility (ITEM) in their annual cross-border impact assessment of national and EU legislation 3, namely “European integration”, “Regional competitiveness & sustainable economic development” and “Cross-Border cohesion”. The purpose of this grouping is to steer indicator selection away from a purely economic assessment towards the overarching goals of CBC programmes. Therefore, at least one indicator out of each of the three groups should be included. However, if no clear logical link to programme effects can be established however, such an indicator should not be used.

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As a third step, all effects which are not covered by indicators at this stage have to be identified. For each of those effects, an additional indicator (A) has to be formulated, that accurately depicts the effect. Furthermore, additional indicators can be proposed for any other effect as well, as an effect can be measured by more than one indicator.

Please keep in mind the scope of a CBC programme here, which is not intended to act as a supplement for other general structural fund allocations, but actually targeting issues of cross border cooperation. When selecting the indicators thus the focus should lie on those covering cross border aspects – the common CBC indicators provide a good insight into what is relevant here (i.e. for example as an economic indicator, not the general change in GDP per region would be of interest, but the actual change in the cross border trade volume). It is also advised to make use of the three different categories of common indicators, aiming to include not only economic ones but also those which are concerned with European Integration and Cross Border Cohesion.

Once experts have completed the intervention logic elements, they should be prepared structured as shown in Figure 2.3 to be used in the workshop. Depending on the font size, and as participants will have to write something on the paper, at least DIN A2 as a target format is recommended.

**Sources:**
Cooperation Programme, Annual Implementation Reports, Common CBC Indicators List, Scientific literature

**Assessment of data availability and data gaps**
Taking into consideration any knowledge gained so far, especially on effects and indicators identified, experts can identify relevant data sources and possible gaps by filling the template provided (annex 3). If experts cannot identify any potential data source for an indicator, note that down in the programme characterisation report, it will be discussed in workshop 1. Experts should consult with their contacts at the MA beforehand, as they will have knowledge on the feasibility of proposed sources.

In principle, the programme authorities have to be able to provide data on all programme indicators. However depending on the timing of the TIA exercise, some indicators, for example those stemming from surveys, might not be available. Both CBC-common as well as additional indicators can be populated based on numerous sources, ranging from EU-level statistical data (EUROSTAT, JRC, but also indexes such as the Regional Innovation Scoreboard or the Regional Social Progress Index) to national and regional statistical data (national/regional statistical offices, national/regional authorities, monitoring data of nature protection areas...) as well as non-official sources such as scientific studies, surveys etc.
In any case, consider the EUROSTAT\(^4\), the ESPON\(^5\) and the JRC\(^6\) databases as well as the INSPIRE\(^7\) geoportal as potential data sources next to the national statistical offices and other sources.

Sources: Cooperation Programme, National/Regional Statistical Offices, Programme Authority

**Reporting**

Concluding step 1 of the TIA, all results have to be summarized in a short report, a template for which is provided in the scientific annex, chapter 11. This report has to be sent out to the workshop participants in advance, enabling them to get a first impression of the findings so far and leading to a more informed discussion during the workshop. In case of multiple workshops to be conducted in Step 2, it has to be clearly marked which sections of the report are relevant to the individual workshops (i.e. if several workshops with varying thematic focus are to be conducted, the corresponding thematic sections and intervention logic elements have to be pointed out).

**Results of Step1**

Characterisation of programme and programme area

*Preliminary reconstruction of the intervention logic*

*Preliminary selection of indicators*

*Overview of data availability*

### 2.2 Step 2 – Identification of programme effects (A2)

As a next step, the preliminary findings and indicator selection has to be verified and/or adjusted with expert involvement in the setting of a one-day workshop. Depending on the scope of the TIA as outlined in the introduction, this step can either be conducted as a single workshop or can be split into several workshops. The decision regarding the duration of the workshop depends on the following:

- Geographic size of the programme
- Thematic broadness of the programme
- Required depth of TIA findings
- Estimation of participant numbers

As the purpose of this step is to identify the validity of the logical chains for each geographic and thematic area of the programme, it is necessary to invite appropriate participants. Ideally, participants should be experts in each thematic area (i.e. usually each SO) and each geographic area of the programme. The participants should be able to cover all relevant functional regions within the programme area. E.g. in case of a strong coastline-inland divide in the

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\(^4\) [https://ec.europa.eu/eurostat/data/database](https://ec.europa.eu/eurostat/data/database)

\(^5\) [http://database.espon.eu/db2/](http://database.espon.eu/db2/) for the current database. The new ESPON 2020 database will soon be available on the ESPON website

\(^6\) [https://data.jrc.ec.europa.eu](https://data.jrc.ec.europa.eu)

\(^7\) [http://inspire-geoportal.ec.europa.eu](http://inspire-geoportal.ec.europa.eu)
area, participants out of both types of regions should be invited. Furthermore, if there are relevant legal or administrative variations (e.g. because of two autonomous regions within a country with varying legal systems) present in the area, participants out of all relevant regions have to be included in the selection.

While the composition of the participants will vary depending on the programme and the number of workshops conducted, some general guidelines can be given on selecting experts for the workshops.

Participants of the workshop should belong to the following groups:

- Programme stakeholders (MA and JS);
- Regional experts outside the programme;
- Representatives of regional authorities active in similar fields as the programme targets;
- Representatives of NGOs;
- Experts from scientific community;
- Representatives of statistical offices.

Programme stakeholders are essential to the process given that they have the best knowledge of the programme and the importance of their participation is self-evident. There is a range of different types of regional experts without direct link to the programme, whose participation would be very beneficial as well. These are experts who have knowledge of the regional context in specific fields relevant to the programme through their work in regional administration, NGOs or academic institutions. Their perception of the effects of programme interventions, given their knowledge of the programme area, can greatly complement the inputs of programme stakeholders with additional and impartial observations about what programme’s effects in the regions. Of special value here are participants from umbrella organisations (such as political bodies, ministries, interest groups/associations) who can cover thematic aspects over multiple regions. Furthermore, invitation of one or two representatives from statistical office would ensure that discussions regarding indicators will take into account data availability, thereby greatly facilitating the discussions on data sources.

In addition, it is important to strive at an equal distribution of participants from both sides of the border. Ideally, parties from both sides of the border should be present for each type of participant described above.

Given that finding a common time and place for a workshop which can welcome all necessary participants is usually a challenge, and yet participation of some experts is crucial, alternative participation solutions should be considered. Technical solution including video conference, for example via Skype, can be arranged. Participants who cannot arrive in person can be invited to join for the whole workshop, or only specific parts when their input is most valuable. This should be arranged in advance and connections should be tested.
Each workshop should include between 10 and 15 participants in order to ensure that joint discussions will enable an equal opportunity to participate to everyone while still basing any assessment on a sufficient number of expert opinions:

As for the composition of the workshop participants, the following is advised:

- From the relevant programme authorities at least one representative per country should attend. If possible not more then 1/3 of the participants should fall into this group.
- 2/3 of the participants should be regional and/or thematic experts
- The composition of those 2/3 will vary depending on the programme. I.e. if the programme area is structurally heterogeneous (e.g. low income peripheral mountainous regions and high income urban regions in one area), a higher number of regional experts is necessary to cover the whole programme area
- If the programme incorporates multiple, very different thematic fields of actions, a higher number of thematic experts is required to accurately cover all fields

The participants list should be defined in close cooperation with the programme authorities. Invitees should receive relevant documents such as the agenda as well as material, in advance in order to provide them time for preparation. The relevant material for participants should include information on the programme which is important in case of participants who are outside of the programme. Except for the workshop agenda, this is:

- Cooperation Programme;
- Annual Implementation Reports (if not available online, should be requested from MA or JS);
- Available programme evaluations and assessments
- Programme Characterization Report prepared as a previous step of the TIA.
- Information about CBC-Interreg Programmes in general (e.g. outlines as published by the Commission)

**Preparation of the workshop**

Experts should take enough time for preparation of the workshop. This includes preparing material necessary for conducting the workshop as well as researching and processing data and information which need to be prepared as inputs to the workshop. The following should be provided as workshop materials: the intervention logic elements printed on posters of a feasible size (at least DIN A2 is advised), pens and markers to write on the posters for all participants, all relevant maps produced printed on paper as well (DIN A3 usually should be sufficient), a printout of all common CBC indicators (scientific annex, chapter 6) and some printouts of the initial report. For presenting the intervention logic posters, either one desk per poster, or alternatively one pinboard per poster is required.

Additional information which is not included in the programme characterisation report, such as context data and maps and a clear structured overview of all programme indicators (both result and output indicators) should be prepared. This additional data, which should be ideally visualized as maps of graphs for better accessibility, should consist of most informative socio-economic indicators. These indicators, in case they were not included in the Programme Characterization Report, should be researched and prepared in advance.
The venue as well as catering should be booked and taken care of in advance. It should be large enough to accommodate all participants and moderators.

Experts should also reflect on the structure of the workshop in advance. Each programme is different and the workshop should be adjusted to address the critical issues that require the input of participants in the workshop. At the same time, in compliance with the CBC TIA methodology, experts should ensure that the three elements are covered: analysis of the intervention logic, identification and verification of indicators as well as discussion of data sources and gaps. Figure 2.1 presents a sample agenda for a workshop which outlines the most important elements.

Table 2.1: Sample agenda of a workshop

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:15</td>
<td>Introduction and welcoming round</td>
</tr>
<tr>
<td>09:30</td>
<td>Introduction to TIA and preliminary results</td>
</tr>
<tr>
<td>10:30</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:45</td>
<td>Part 1: Intervention logic revisited</td>
</tr>
<tr>
<td>12:30</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>12:30</td>
<td>Part 2: Identification and verification of indicators</td>
</tr>
<tr>
<td>15:00</td>
<td>Coffee break</td>
</tr>
<tr>
<td>15:15</td>
<td>Part 3: Data sources and gaps</td>
</tr>
<tr>
<td>16:15</td>
<td>Summary of the workshop findings and next steps</td>
</tr>
<tr>
<td>16:45</td>
<td>End of the Workshop</td>
</tr>
</tbody>
</table>

**Conducting the Workshop**

In introduction and welcoming round of the workshop, experts welcome participants and present themselves. In an introductory round, participants should also present themselves, their organisation as well as field of expertise.

**Introduction to TIA and preliminary results**

In the introduction to the TIA part, it is important that a short presentation of the TIA, its goals, methods and limitations is given. This is due to the fact that the term and method might not be common knowledge among the participants. Introductory clarifications, especially pointing out the difference between TIA and an evaluation, are necessary. In order to bring participants’ attention to the purpose of their activities, the overall context and steps of the CBC TIA methodology, possibly including brief background information about the ESPON CBC TIA project, should be presented. Additionally, an overview of the initial findings of step 1 has to be presented in order to introduce the input to the workshop.

**Part 1: Intervention logic revisited**

In this part participants are asked to provide their input on the effects of the programme following the logical chains developed and suggesting any changes or additions. In order to complete this task, it is important to provide them with relevant background data. This includes the information already collected in the Programme Characterisation Report (Step 1), but also additional graphs and maps regarding context indicators depicting regional characteristics relevant to programme activities. Information on the socio-economic context relevant to
the programme activities provides an important background information against which workshop participants can reassess different elements of the intervention logic. Knowledge of the situation of the programme area especially aids the judgement on the appropriateness of needs identified as well as possible effects of programme. Visualization of this context data is preferable in order to enable a quick impression of the socio-economic context of the programme area which should aid reasoning of experts in regards to the programme intervention logic.

The proposed setting for this task is to present the intervention logic on posters (at this point, the indicators proposed should be covered in order to focus on effects first) and discuss their appropriateness in small groups. Any proposed changes should be written directly on the posters. The indicators proposed should be covered during this exercise. Participants should be encouraged to change between posters and also to change groups in order to enrich the discussions for each intervention logic. Input information such as data and information from the Programme Characterization Reports, as well as context data visualized should be hanged in an accessible location or projected on the screen.

Moderators should be aware that an important discussion point for each effect is what territorial effects are believed to be identifiable and measurable. While for some effects impacts can be attributed to single regions, other effects probably will not show differentiated impacts across the whole programme area, or might even go beyond the project area itself. As this is a crucial point in the further process of the TIA, it has to be noted if an effect will be measurable either:

- In single clearly distinct regions (e.g. NUTS 3, NUTS 2, districts/municipalities)
- In fuzzy regions depending on their properties (e.g. mountainous regions/lowlands, urban/rural regions, industrial/non industrial regions ...)
- Covering multiple regions or even the whole programme area
- Spilling out beyond the programme area

After each participant has had the opportunity to discuss each intervention logic, each poster will be revisited by the whole group, with moderators reading out additions and alterations. Participants will decide on whether to accept or decline them, ideally in a consensual decision (if none can be reached, a voting should take place). Time should be reserved for some discussion and weighing arguments for and against to the proposed changes. All decisions should be clearly reflected on the posters directly. Additionally, for each effect it should be noted if it is measurable in the short (less than 5 years), medium (between 5 and 10 years) or long term (more than 10 years).

**Result**

Graphical representation of the systemic picture of the intervention logic of the programme

**Part 2: Identification and verification of indicators**

In this part the same posters are used, now with the “indicators” column visible. The goal is to cover each effect identified in the logical chains with at least one indicator. Participants should
be encouraged to think broad, the expected data availability *should not*, at this point, limit the proposal of an indicator. It has to be made clear, that at this point still only proposals are made – if the application of an indicator seems unrealistic, or if a better indicator is identified later on, the indicators can still be changed later in the TIA process. At this stage, the exercise serves collection of ideas, rather than final selection of indicators. Qualitative tailor-made indicators can also be formulated as long as participants make sure in discussions that data collection for such indicators is possible.

Following the same method as for part 1, participants should discuss and note any changes or additions of indicators (also making use of the “common CBC indicators” as provided by the project handbook) they propose. It should also be encouraged to note down any second-best indicators or proxies that might be used for regionalisation of first-best indicators, however all such indicators should be clearly marked. After group discussions, each poster again is revisited by the whole group, deciding on accepting or declining changes and additions (consensual or via voting).

**Result**
A list of indicators with clear links to expected programme effects established, plus second-best and proxy indicators

**Part 3: Data sources and gaps**
In the final part, participants will be asked for their input on how to measure the indicators proposed. For each indicator, the results of the initial data screening for the programme characterisation report (Step 1) have to be presented, giving an overview of what is already known as a potential data source. The input of representatives from regional statistical offices is most valuable at this step as they can provide information on whether data for selected indicators is available, easily accessible and appropriate, also in regards to geographic resolution. The moderators should make sure that representatives of statistical offices share their knowledge in this regard as it considerable facilitation to the exercise.

The proposed setting for this exercise is a moderated discussion with the whole group, as free exchange of ideas will stimulate brainstorming on sources. Ideally, by the process a potential data source for each indicator (providing data at a territorial granulation as low as necessary) is identified. Especially “exotic” data sources such as specific scientific studies from different programmes (including ESPON projects) focusing on a particular region or topic relevant to the indicators, regional surveys etc. should be discussed here. These may not be identified in desk research, but participants may be aware of them through their day-to-day work.

**Result**
A list of sources proposed to be able to provide data or context for the selected indicators
Closing of the Workshop
During the final part, any additional comments by the participants should be collected. Provide an outlook on the next steps – emphasizing the second workshop to be conducted for a qualitative assessment. As described in above the participants to some extent will be the same as for this workshop. If possible, try to already collect information on possible attendance.

Participants should be informed about next steps of the CBC TIA. Experts should also note the general timeframe of the second workshop as well as note that participants for the second workshop are expected to involve a more diversified set of actors.

Follow-up
In a follow-up of the workshop, results should be entered into in the Impact Assessment Matrix (IAM). This can be done after the workshop, as it is not necessary to directly involve workshop participants in the step of filling in the IAMs. Fields of the IAM that can be filled at this stage are indicator names, temporal distributions and any accompanying notes (e.g. if an indicator is likely to be assessed qualitatively). It is important to note any statements or justifications given by the participants, as in any such method with expert involvement a subjective element is introduced. Thus only by recording justifications and explanations, the process can be verifiable.

Results of step 2
Validated systemic picture of programme effects in the form of the reconstructed intervention logic
List of proposed indicators for each programme effect
List of potential data sources attached to each indicator (wherever possible)

2.3 Step 3 – Indicator Assessment (A3)
Taking the list of proposed indicators from step 2, the goal of this step is to determine if an indicator can be populated with quantitative or qualitative data from external sources (i.e. not qualitatively assessed by the TIA team), and if so, the required data should be collected or calculated.

- **Quantitative assessment**: the net impact of the programme on the indicator in question can be calculated, no expert judgement has to be involved.
- **Semi-quantitative assessment**: While data is available on the gross-change of indicator values in the programme area, either the net impact of the programme cannot be calculated directly or the regional granulation of data is not given. For establishing a net impact, expert judgement supported with quantitative data is necessary.
- **Qualitative assessment**: Neither the net-impact nor the gross change can be determined by calculations; therefore the impact of the programme has to be assessed qualitatively entirely.

For each indicator identified in step 2, it has to be determined which way of assessing the programme impacts can be applied in the TIA process. The TIA service provider, based on inputs from the workshop, should pinpoint the exact data sources, taking into account the
regional scope of impacts as identified in Step 2. Based on the final research on data available for specific indicators, a decision can be made on how to treat the indicator for the further process. It has to be noted, that the best fitting assessment method depends both on the indicator itself as well as on the data available for it. Attempting quantitative net-impact calculations with low validity as the quality of the underlying data is not high enough will be fruitless. Also, some indicators in case of specific topics (such as governance, quality of cooperation), are better suited to qualitative or semi-quantitative assessments in the first place. The following section for each method outlines prerequisites or properties of indicators.

At this point, experts still have lists of all possible indicators made during the workshop. The indicator assessment should be conducted for all indicators, however along this exercise experts should shortlist the indicators which can be used for the impact assessment. It is important to keep in mind that the indicator shortlisting should be based on expert assessment regarding its suitability rather than data availability.

**Assessment methods**

*Quantitative assessment*

For each of the indicators on the list, that has a data source attached, the respective source has to be reviewed. For accepting the source and including the data, the following criteria have to be fulfilled:

- The data has to fit the indicator it is going to populate as close as possible
- No significant differences in data collection or calculation methods are observed between countries (i.e. the data has to be comparable)
- Required regional resolution (according to the regional scope of impacts) without data gaps, or with the possibility to apply estimation methods
- Required temporal availability without data gaps. As a minimum, this is data for the baseline point (usually at the beginning of the programming period) and for a point in time close to the conduction of the TIA. This also depends on the temporal orientation of the indicator as determined in step 2.

It is likely that few indicators fit all criteria, however several mitigation strategies can be applied, detailed instructions for which are provided in the handbook. The data availability for calculating net-impacts has to be assessed, in order to decide if the quantitative approach is feasible or not. In case that the data availability is deemed insufficient, a semi-quantitative assessment as described below should be applied. A process for a qualitative impact assessment for those indicators which cannot be populated with data is foreseen in step 4 (see section 2.4)

The sources for quantitative data for programme indicators should be foreseen in the Cooperation Programme while sources for other indicators should be available in central statistical sources such as national/regional statistical offices or Eurostat. Furthermore, primary production of indicator data as described at the end of this working step can be considered.
Mitigation strategies

*If the data available does not fit the indicator envisaged*

Having available the second-best indicators from the workshop, it has to be checked if they fit the available data. If not, the TIA team should reflect if there are other second-best indicators that can be established having a clear causal link to the measures and which can be populated by the available data. If no link can be found, the indicator has to be added to the shortlist for a qualitative expert assessment.

*If differences in calculation methods between countries occur*

The TIA team should seek the specific definition of how the data is calculated and explore the possibility to recalculate the existing data to be comparable. For example, if data on age distribution works with different age classes in the two countries, the classes could be recalculated approximately. *Such recalculation have to be approached with great caution.* It is preferable to add an indicator to the list of those to be assessed qualitatively, then producing non-robust estimations on a quantitative level.

*If the required regional granulation is not given*

If data is available only at a higher territorial level than required, check if the impact can be regionalized by output- or expenditure data. This is the case, if an indicator (e.g. touristic arrivals in a region, measuring the cross border cooperation efforts in marketing the border region to tourists) can be linked to a specific type of output (e.g. number of supported marketing projects) or expenditure (e.g. amount spent on marketing projects), both of which have to be available at NUTS 3 level. This calculation however has to be based on the net-impact, thus it can only take place in subsequent step 4. For all calculations making use of output or expenditure data, keep in mind the limitations as stated in section 2.1. If an indicator is deemed to be regionalizable in this manner, it has to be noted down in the IAM and the gross effect has to be established as described below.

If no such calculation is possible, the most common practice for regionalization is to make use of other proxy indicator(s) available at both the level of the dataset and the level of the required regional granulation. A process for this regionalization is provided in annex 5.

*If there are temporal data gaps*

For those gaps, depending on the type, a number of common techniques are available for producing estimations. Those techniques should only be used to calculate data for either the baseline point or for data between the baseline point and the most recent available point in time. They should never be used to estimate the future development within a CBC TIA. Some proposals are provided in annex 5.

**Result**

Provision and preparation of necessary data for all indicators assessed quantitatively
Semi-Quantitative Assessment

The criteria for Semi-Quantitative Indicators are less strict than for quantitative indicators, as the purpose of such an assessment method is to overcome shortages where no other calculation method is available. An assessment is considered semi-quantitative if concrete quantitative data on a certain indicator is available, however it cannot be used for quantitative calculation. This is the case if an indicator:

- lacks the required regional granulation;
- has significant temporal gaps;
- does not enable determining the net impact of the programme.

These issues often cannot be overcome by estimation methods in the quality desired or required. In such a case, the quantitative data available is used only as an input to qualitative impact assessment which is made based on expert judgement opinions in a workshop setting (see step 4 in section 2.4.2).

In order to enable a semi-quantitative assessment in an expert workshop, available and relevant data to each indicator in an easily accessible format should be prepared. The data necessary to obtain differs depending on the indicator and the relevant data gaps (e.g. data not finely enough territorially granulated). Examples include funding-indicators, output-indicators or proxy-indicators which enable determination of net-impact or regionalization. The specific semi-quantitative impact assessment method proposed for the workshop (MAPP), provides guidance on which data should be presented at which point in order to support judgement-making (see 2.4.2).

The data should subsequently be processed so that it can be easily accessible to workshop participants. Provision of graphs and figures as well as maps is highly recommended. Collection and processing of this data for purposes of semi-quantitative assessment should be carried out prior to the workshop.

Result
Indicator data gathered (gross development) gathered for all indicators assessed semi-quantitatively
Supporting data gathered enabling net-impact calculation or regionalization

Qualitative Assessment

A purely qualitative assessment differs from a semi-quantitative assessment in case when no data on the given indicator is available and no aspect of the indicator in question can be backed by quantitative data. In such case, a given indicator has to be assessed with expert judgement as described in step 4 in section 2.4. However, in this case it is possible to use data to back expert judgement, even if this data does not directly concern the indicator. Data which can be used is context data concerning the context relevant to a given indicator. The background- or context data necessary naturally differs from indicator to indicator. For example: regional unemployment statistics provide the context for assessing programme impact.
where employment in a certain sector is supported; regional tourism statistics (p. ex. day tourists and overnight stays) provide the context for assessing programme impact where certain cultural sites are supported. Deciding on the context data to collect and offer to the experts taking part in the workshop in step 4 requires a balancing between providing enough variability in the data to support judgement on without overloading participants with too much information. Also in this case it is recommended to provide an accessible presentation of the context data, such via graphs, figures and maps.

Data for context indicators should be readily available in centralized data sources such as regional/national statistical offices as well as Eurostat.

The following section on indicator data production is an optional part of the TIA and provides an opportunity to produce background data on all indicators to be assessed qualitatively, which can be used as an input for the workshop in step 4. In addition, step 4 should be undertaken in case experts decide to shortlist qualitative tailor-made indicators which were identified in the workshop.

### Result

Supporting data gathered enabling impact assessment for all indicators assessed qualitatively

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**Optional: Indicator data production**

If deeper knowledge need regarding certain indicators which cannot be covered by readily available quantitative data surfaces, an additional exercise for production of data qualitatively can be conducted. Two options for that are as follows:

- Production of qualitative indicators with a survey/questionnaire
- Organizing a workshop “production of qualitative data and trend analysis”

The methods for this optional step of indicator data production are presented in the annex, chapter 6.

### Results of step 3

Collected and processed necessary data for each indicator which is set for a quantitative assessment

Collection of indicator- and context data for every indicator to be assessed semi-quantitative Collection of context data for every indicator to be assessed qualitatively (optional) produced qualitative data

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## 2.4 Step 4 – Impact assessment (A4)

Step 4 corresponds to the impact assessment. The impact assessment is conducted for each indicator based on the indicator assessment provided in step 3. In the following, the three methods of impact assessment (quantitative, semi-quantitative and qualitative) are described in more detail.

### 2.4.1 Quantitative net impact assessment

As the type of indicators, the data situation and the programme areas vary widely, three different approaches are proposed. The TIA team should make a decision on suitable approach,
or a mix of approaches, based on the knowledge of available indicators and data. For all indicators which (after application of estimation techniques) fulfil all criteria as outlined in step 3, the gross impact \( x_R \) can be calculated with \( x_R = x_R^{T1} - x_R^{T0} \), where R is the NUTS 3 region, T1 the point of conducting the TIA and T0 the baseline point. The results can be added to the IAM, documenting all estimation techniques used in order to make the calculation reproducible.

The data availability for calculating net-impacts has to be assessed, in order to decide if the quantitative approach is feasible or not. In case that the data availability is deemed insufficient, a semi-quantitative assessment as described below should be applied. Methods for calculating the net-impact quantitatively are presented below:

“Small scale counterfactual” approach

The “small scale counterfactual” approach is a method of calculating the net-impact of a programme by comparing the actual development of a region’s values for a given indicator with a hypothetical scenario in which no actions have been taken by the programme in the region. In an ideal situation, experts would like to compare the change in the result indicator in a world where the programme was implemented against a world where the programme was not implemented (and identical for all the rest). The small scale counterfactual attempts to develop such scenarios and compare them against each other in order to calculate the net impact of the programme.

In the first step, it is necessary to establish a group of beneficiaries and a group of non-beneficiaries who are active in the same fields, as a basis for a comparison between the two groups. Unlike the proper counterfactual approach, the establishment of test- and control groups are in this case not established through statistical matching methods (e.g. propensity scores, discontinuity- or pipeline approaches) but on a case-by-case selection. This consists of matching funded (“treated”, beneficiaries) with non-funded (“non-treated”, non-beneficiaries) entities which show the same observable traits, such as qualities as expressed by the selection criteria of the measures which are to be assessed, similarities in the type and size of the entity as well as geographical location. “Treated” entities in such a case can be e.g. companies/associations which successfully applied for funding, groups of companies/associations or in some cases (depending on the indicator in question) also regions where projects were implemented. “Untreated” entities on the other hand can be e.g. unsuccessful applicant companies/associations or regions where no projects were implemented. This “small-scale” approach will be justified by the fact that both test and control groups will be too small in reality to establish statistically sound matching methods – thus it seems justified to compare in a “difference-in-difference” assessment the changes over time of both the beneficiaries with the non-beneficiaries, which will provide a net effect of the assessed measure within the CBC programme.

Having established groups of beneficiaries and non-beneficiaries, data on the indicator(s) which characterize the programme impact in regards to its priorities or specific objectives will be obtained. Data has to be obtained at two different times: before and after the intervention.
and for two different groups: beneficiaries and non-beneficiaries. In case of some indicators data may not be publicly available and can be obtained only from beneficiaries or non-beneficiaries. For example, beneficiaries implementing actions aiming at cross-border collaboration of educational institutions may only keep record of numbers of certain activities or types of persons who benefited. In this case, experts should consult beneficiaries (and non-beneficiaries who may or may not implement similar interventions) in order to request the relevant data from them.

This set of data should enable comparison of indicators separately for these two groups, in order to identify the pure effect of the treatment, i.e. of the intervention of the programme. For example, one finding may be that the change in the patent applications of untreated units is not significantly higher than the one occurred for the treated ones. This would imply that the result of the intervention is not significantly different from zero, i.e. that companies would have submitted the same number of applications without the programme. On the other hand, if the change in patent applications by “treated” units is significantly higher than in the “untreated” ones, this relative difference can be considered the “net-impact” of the CBC programme.

For example, in case of net impact on unemployment rates, experts calculate the difference in unemployment rates between before and after the intervention for beneficiaries of the funding as well as non-beneficiaries, i.e. identified similar entity who did not receive funding. This is presented in the figure below.

*Figure 2.4: Example of the development of beneficiary and non-beneficiary groups*

The relationship can be formally described as the following:

\[ \Delta_{B-A} = \Delta E + \Delta O_{B-A} \]

In which

- \( \Delta_{B-A} \) is the difference between beneficiaries and non-beneficiaries,
- \( \Delta E \) the real, but not identified impact of the intervention,
- \( \Delta O_{B-A} \) different changes (e.g. due to the macroeconomic setting).
The net impact is the difference between difference over time in the beneficiary and the non-beneficiary group.

**The “funding framework” approach**

If indicators in question typically rely mainly on various funding resources, the establishment of the “funding framework” for a region can be used to identify the net effect. The funding framework identifies a share of funding from different funding resources in case of specific intervention areas (represented by priorities/objectives/specific objective as representative for the investigated indicator). The assumption is that the share of funding of each programme on each intervention area is responsible for the share of impact in the specific intervention area.

Establishment of the funding framework has to be done in close cooperation with regional authorities and the programme authorities, as they can be expected to have an overview of EU, national and sub-national funding schemes available in the region. Having identified different sources of funding, financial data from each source of funding in regards to each priorities/objectives/specific objective relevant to the indicator has to be obtained. In the next step, the share of each source within the total amount of public expenditure in regards to the objective/specific objective relevant to the indicator has to be calculated.

*Table 2.2: Sample funding framework table.*

<table>
<thead>
<tr>
<th>Priority/objective/specific objectives (corresponding to the indicator)</th>
<th>CBC</th>
<th>Other ERDF</th>
<th>EAFRD</th>
<th>National</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve the framework conditions for innovation (for the indicator Size of investments by companies in R+D+I)</td>
<td>€</td>
<td>%</td>
<td>€</td>
<td>%</td>
<td>€</td>
</tr>
<tr>
<td>Sustainably valorise cultural and natural heritage (for the indicator Joint products related to historic, cultural and natural heritage developed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Consortium, 2019.*

The calculated share in % of the CBC programme will be further used to calculate the net impact. The change in indicator values at the time of the start of the intervention and at the time of the end of the intervention provides the gross impact. The net impact is arrived at through multiplication of the gross impact with the calculated share.

It should be noted that experts should identify exactly which priority, objective or specific objective of each funding source aims to contribute to the specific measure that is captured by the indicator in question; this is necessary in order to compare appropriate amounts of funding among different funding schemes. In many cases, this can lead to generalizations and inaccuracies given that certain priorities and objectives can be committed to measures with multiple effects, instead of only to a measure which captured precisely by the investigated indicator. In other words, the funding allocated by programmes is often broken down only at
general levels, e.g. of priorities, which encompass different objectives and measures captured by multiple indicators. The volume of funding cannot always be linked directly only to the measure captured by the indicator. As a result, higher volumes of funding do not necessarily mean that the share of funding in regards to the indicator is as high as the volume committed to the objective. However, the expert has no means of breaking down this amount of funding to the specific indicator in such cases. Therefore, experts have to continue working the assumption that the share of the funding sources for each specific objective reflects their impact on the indicator in question, relevant to the specific objective. If no other funding scheme is available and the impact is likely to be based on CBC funding for the most part, the CBC net impact corresponds to 100%. Moreover, under the assumptions of this approach, the development of an indicator and its territorial differentiation is almost directly dependant on the funding made available; therefore, it is only appropriate in circumstances where this approximately true.

Another practical issue concerning this approach is availability of financial data on the regional level. While for some funding schemes this is readily available, data availability and quality might vary significantly between countries. Additionally, the scope of the funding would have to match the CBC programme, which will only be the case for certain kinds of indicators.

The “funding framework” approach is a quantitative method which relies on availability of financial data. As a result, the calculations of shares can be performed by the experts alone. A semi-quantitative variation of this method in which the share of funding is assessed by experts (instead of being derived from financial data) is presented in the MAPP method described below.

### 2.4.2 Qualitative/Semi-quantitative net-impact assessment

Qualitative or semi-quantitative net impact assessment can consist of one or several workshops with a thematic and/or regional split among them, just as for the workshop 1 in step 2. Participants can (partly) be the same as for workshop 1, however some differing guidelines can be given:

- Participants should be regional and/or thematic experts as described in case of workshop 1. In this workshop, however, it is more important to achieve a higher proportion of persons who are not from JS/MA than in the previous one, in order to obtain a differentiated view of programme impacts.
- When programme stakeholders participate in the expert panel, it has to be considered that there could be a conflict regarding the objectivity of their judgement which can be linked to self-assessment. On the other hand, programme stakeholders usually know the mechanisms of the implementation of the program very well. So, a careful consideration of disadvantages and advantages is needed. This problem can be mitigated by, as mentioned above, a higher proportion of non-JS/MA participants as well as attendance of participants outside of the programme.
- The selection of participants has to be based on the framework of the programme, taking into special consideration the indicators to be assessed. The thematic fields and regional distribution of those indicators will determine if a broader spectrum of thematic experts (e.g. members of the scientific community) or regional experts (e.g.
regional authorities, NGOs, chamber of commerce and other representative bodies etc.) is necessary, to capture the programme impact. Participants can include beneficiaries as they should have knowledge about the impact of their projects.

- Experts outside of the programme, who do not receive programme funding, should be invited in larger numbers, as this should also ensure unbiased expert judgement. Thematic experts from various regional organizations, who can assess the impact of the programme from the perspective of their expertise, are important as well.
- Ideally, 12-15 participants per workshop are envisaged

**Workshop preparation**

In order to enable the expert panel to make an informed decision, all suitable pieces of information on the indicators should be prepared and made available to them. These include:

- verified intervention logics as an outcome of the first workshop;
- context data presented previously (especially output- and expenditure data) in form of graphs and maps;
- already established net impacts for indicators;
- any additional information that can be given based on step 3.

A useful tool for presenting the information in a structured manner is the IAM (filled to the extent possible). The IAM should be filled in with information on indicators assessed quantitatively, as well as also with some information on indicators to be assessed qualitatively in the workshop (such as baseline data). This information has to be readily available to the participants, as it will be necessary for establishing impacts for the separate regions. Maps are a particularly important input and should be printed out before the workshop.

For conducting the impact assessments, it is necessary that the TIA team decides on the adequate method to be used for each indicator already in the preparation phase of the workshop(s).

The length of the workshop(s) depends on the tasks to be completed. I.e. if solely a qualitative impact assessment is foreseen, with few indicators to cover, half a day can be sufficient. If multiple indicators or multiple assessment methods have to be applied, the length can stretch to a day. A sample Agenda is provided below.

**Table 2.3: Sample agenda of a 1-day workshop**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:15</td>
<td>Introduction and welcoming round</td>
</tr>
<tr>
<td>09:30</td>
<td>Overview of the workshop goals, key information presentation</td>
</tr>
<tr>
<td>10:30</td>
<td>Part 1a: Qualitative Impact Assessment</td>
</tr>
<tr>
<td>11:15</td>
<td>Coffee break</td>
</tr>
<tr>
<td>11:30</td>
<td>Part 1b: Qualitative Impact Assessment</td>
</tr>
<tr>
<td>13.00</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>14.00</td>
<td>Part 2: Semi-quantitative Impact Assessment</td>
</tr>
<tr>
<td>15.30</td>
<td>Coffee break</td>
</tr>
<tr>
<td>15.45</td>
<td>Summary of the workshop findings</td>
</tr>
<tr>
<td>16.15</td>
<td>End of the Workshop</td>
</tr>
</tbody>
</table>

*Source: Consortium*

Parts 1a, 1b and 2 stand for the qualitative and semi-quantitative impact assessment.
Conducting the Workshop

The first two parts, introduction and overview, should give a quick outline of the goals and scope of the workshop. It is important to remind participants that that judgements should only be made on what is the impact, and not whether that impact is good or bad regarding the programme goals.

This part should also present information on the indicators to be assessed. The presented information should set the background for the participants to judge programme impacts, thus it is advised to have any data, maps and graphs which might be relevant included in a presentation as well as printed out on paper to hand it to the participants. Important information to be presented is regionalized expenditure data. However, moderators should limit the presentation to key information only, in order not to overload the participants. Additional information can be prepared and presented on request.

The overall goal of this step is to collect expert opinion on the magnitude of net-impacts as well as their territorial distribution in the programme region with help of different qualitative and semi-quantitative methods. The results of this exercise are then translated by the TIA service provider into the final impact assessment as described in step 5. In the course of the workshop, three main products are created:

- Judgement on impact magnitude (qualitative assessment)
- Judgement on net-impact or territorial distribution of quantitative indicators (semi-quantitative assessment)
- (if relevant) maps on regional distribution of impacts differing from "standard" classification of regions (such as NUTS3)

The preferable setting of the impact assessment itself depends on the impacts to be assessed and the composition of the panel. There are various methods available which have been developed for impact assessment or evaluation based on expert judgement. In principle, any such method, that allows to determine the magnitude of effects of a programme on a certain region and indicator is suitable for a CBC TIA workshop. For the qualitative and semi-quantitative assessments, two main methods are proposed: Focus Group, a flexible moderated discussions/round tables method and MAPP\(^8\) which is a method used in various EU-programme impact assessments and provides very structured approach.

It is important to emphasize that conducting assessment according to each method should be supported by appropriate data, as described above in Step 3 (see section 2.3). Qualitative assessment should involve context data, while semi-quantitative assessment should refer to relevant available indicator data. During the qualitative expert judgement, moderators should refer to relevant background data whenever possible in order to remind participants to include it in their judgement. In addition, moderators should also provide a specific guidance on how quantitative data can aid judgement so that participants know in what way the available data

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can support their decision-making. This is essential in order to ensure that participants are not confused by the quantitative data presented.

**Focus Group**

There are two approaches to the composition of the focus group, depending on the thematic area of the indicators as well as the expertise of participants. If indicators are situated in the same or similar thematic fields and participants are mostly of experts for this field, a full panel moderated discussion in the form of a focus group on each indicator is the advised method. If the thematic fields of the indicators are more widespread it is recommended to divide the panel into groups based on assigning different indicators to the fields of expertise of participants. Groups can be recomposed if additional discussions are necessary. In the end, groups should present their results to the whole panel, in order to agree on the magnitude. In case of both approaches, each indicator should be presented separately by the moderators, along with relevant data and maps. Moderators should guide participants in the use of the data by suggesting how each specific set of information is relevant to the judgement on the impact assessment. Each expert then is asked on his or her opinion on how to fill the remaining fields of the IAM for this indicator.

**MAPP**

MAPP (Method for Impact Assessment of Programmes and Projects) is a structured semi-quantitative impact assessment which incorporates use of quantitative data. The main reasons why MAPP is considered relevant for the TIA include:

- The method is particularly suited for analysing more complex long-term objectives that can usually not be assessed with the only one or more quantitative indicators.
- It has an open context-orientated approach that allows identifying not only planned, but also unplanned impacts.
- With MAPP, a specific programme is assessed in relation to other ongoing programmes and/or other external factors. Thus net impacts can be estimated against gross development trends.
- It helps to bridge the “attribution gap”, i.e. the gap between outcomes that can directly be attributed to a specific programme/project and higher level outcomes that are also influenced by other measures/factors.
- It is a systematic approach and the use of a point system produces results of greater external validity than purely qualitative data, e.g. derived from interviews or focus group discussions.

The MAPP method comprises 3 main elements: life curve, trend analysis, and influence matrix. The life curve sets the context for the assessment, the trend analysis shows the overall trends of different indicators (i.e. irrespective of any specific programme), while the influence matrix shows the net effects by depicting how the trends were influenced directly by the programme. All of these tools use a point system (from 1 to 4) and are based on stakeholders’ perception/experience. More specifically:

*Life curve:* It shows the overall development trends (based on background indicators selected by the group, e.g. employment) in the cooperation area along a certain timeframe, beginning
before the programme started and ending at present. Participants are asked to assess the development of each indicator each year according to a five point scale. These assessments should be based wherever possible on data on such indicators.

**Trend analysis:** With this matrix, detailed development trends on the TIA indicators are assessed over the same time period. These assessments again should be based on data if available. Participants are asked to score each indicator from 0 to 4 for every year and for every region, giving a general trend from the first to the last year as a gross magnitude. The regions for that purpose have to be defined by the participants, i.e. if NUTS3, any other administrative regional differentiation, or any functional regions the participants define themselves.

**Influence matrix:** The influence matrix represents the net-impact determination, putting the CBC programme up against other factors influencing the development of an indicator. These can be other funding programmes (EU, National or private) as well as non-funding related developments. This method can be used either for qualitative assessments (where the influence value is taken into account qualitatively when making the magnitude judgement from the trend analysis) or for semi-quantitative assessments (where the influence value is multiplied with the gross development of an indicator).

**Table 2.4: Sample influence matrix**

<table>
<thead>
<tr>
<th>Influence matrix</th>
<th>CBC</th>
<th>ERDF</th>
<th>EAFRD</th>
<th>National</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of investments by companies in R+D+I</td>
<td>5%</td>
<td>40%</td>
<td>0%</td>
<td>25%</td>
<td>20%</td>
</tr>
<tr>
<td>Joint products related to historic, cultural and natural heritage developed</td>
<td>10%</td>
<td>35%</td>
<td>35%</td>
<td>0%</td>
<td>20%</td>
</tr>
</tbody>
</table>

*Source: Consortium*

For all judgements, explanations and justifications have to be recorded. In the IAM, all results have to be added and the process applied has to be explained.

**Arriving at expert judgement on impact magnitudes**

Each method should ultimately lead to providing a judgement on impact assessment for each indicator. This will be the judgement on the magnitude of the impact (0-4; where 0 stands to no impact and 4 for very high impact) and its direction against the baseline for each region (qualitative assessment) or a judgement on the net-impact of the programme (semi-quantitative assessment). Participants should be reminded that the judgement they are making is on the net impact of the programme, as separated from impact of other interventions. In addition, moderators should explain the difference between judgement which only reflects or forecasts the trends of relevant available quantitative data as well as a qualitative judgement which in informed by relevant available quantitative data but accounts for the significance of impact of the programme, from the perspective of the expertise of participants. In the case of this qualitative exercise it is more appropriate to assume the second strategy which is genuinely qualitative. The reason for emphasizing this is also to avoid a situation where experts select different magnitudes based on their diverging concepts of qualitative judgement. Some experts may assess the magnitude of the impact of the programme as low based on its
measurability in quantitative terms, but nonetheless add that it is significant in terms of its qualitative contribution. In contrast, selecting the second strategy would lead to experts in their judgement directly reflecting the qualitative significance of the impact, despite its low quantitative measurability, and, as a result, selecting higher magnitude.

Any disagreement between the experts, either within the full groups or within divided groups, should open discussions ideally leading to a consensus at the end. If no consensus can be reached, the decision on the impact magnitude has to be made by voting.

When assessing impacts qualitatively, during the expert judgement experts should be asked to regionally differentiate their judgement, in order to account for the territorial distribution of impacts. The basis for this judgement can be expenditure- or output data on the regional level, but also socio-economic, geographic, or other properties of a region leading to different susceptibility towards a given effect. When assessing impacts semi-quantitatively the territorial distribution should be depicted by the underlying quantitative data already.

Judgements have to be well justified, including a reference to relevant quantitative data supporting the expert decision-making. Well-elaborated justifications should be recorded in the IAM under the guidance of the moderators.

Results of step 4
Established net impact value for every indicator
Filled IAM as manifestation of qualitative and quantitative assessments
Recorded workshop discussions as input for reporting
2.5 Writing a summary analysis report (A5)

While Working Steps 1-4 are mainly concerned with assessing and producing data on the impact of the programme and its background, bringing together all that information in a synoptic document in a comprehensive format is the goal of working step 5. The purpose of such a document is fourfold:

- providing an understandable and easy to read summary that can be used e.g. in the communication with politicians or the general public
- documenting the process, the applied methods out of the “toolbox”, making the TIA verifiable
- describing the impacts of the programme on a regional level
- identifying areas of improvement for future programming periods

In order to structure the reporting, a template has been developed which predefines the sections to include in such a document as well as provides guiding questions for formulating the information to include. The template is provided in the scientific annex.

Additional to documenting the process itself, the report also has to include written conclusions and summarizing elements. Maps of the results have to be displayed, providing explanations and interpretations of the TIA. The report has to outline the following points:

- Are there areas, that have been disproportionally impacted by the programme in relation to others?
- Are those impacts concentrated on specific types of regions? Which ones?
- Which imitations in relation to data availability are relevant?
- Which data needs are there for future programming periods?
- Also, critically reflect on the intervention logic and indicator selection – what were the issues there, how do they affect the TIA?

Explanations should be underlined with maps, tables and graphs wherever possible to increase readability of the report.

Keeping in mind the different target audiences, it is especially important to build the corresponding sections accordingly. The information needs of the general public differ from those of the programme authorities – while the former will benefit mostly from relatable descriptions of what the programme has actually achieved, the latter will benefit more from input for upcoming programme periods or relevant information for a programme evaluation. Thus the sections are clearly distinguished in the template with guidance on what to include, in order to streamline the reporting process. The sections included in the report are:

- Introduction
- Executive Summary
- Initial programme assessment findings
- Territorial Impact Assessment process
- Territorial Impact Assessment results
- Methodological commentary on the programme

An important aspect of any territorial impact assessment are maps, as they make distribution of impacts tangible and understandable to the target audience. They accompany the written assessments and (oftentimes) show patterns and core information at a glance. As further
specified in the handbook, the use of maps is advised both in the summary as well as the detailed territorial impact assessment section.

Table 2.5: Proposed structure of ex post CBC TIA report

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>As the final report is supposed to be a standalone document, a short introduction has to be provided on what is the purpose of the report, what programme is tackled by the TIA, what steps have been undertaken etc.</td>
</tr>
<tr>
<td>Executive Summary</td>
<td>The executive summary is supposed to be usable on its own, independent of the complete report. It serves mainly for communication purposes, e.g. to politicians or the general public and should be focusing on the results rather than the process of the TIA.</td>
</tr>
<tr>
<td>Initial programme assessment findings</td>
<td>In order to provide a solid background for the further TIA process the following are described: context and programme area description, programme framework characterisation, other funding instruments in the programme area.</td>
</tr>
<tr>
<td>Territorial Impact Assessment process</td>
<td>Describing the TIA process is especially relevant, as the methodology includes various subjective elements (wherever expert opinion is brought in) which need to be thoroughly documented, as well as several different options for setting up the impact assessment. In order to make the process verifiable, the working steps have to be thoroughly documented and justified. The elements include selected TOs and SOs for the assessment, presentation of finalized programme intervention logic including selected indicators, description of net impact determination methods as well as results recorded in Impact Assessment Matrices (IAMs) (see section 2.4.2).</td>
</tr>
<tr>
<td>Territorial Impact Assessment results</td>
<td>As the core part of the report it presents a synoptic view, describing and interpreting the results of the previous working steps. The section is split into summary of main findings as well as impact on the regions described per each SO, differentiating the net impact between different territories.</td>
</tr>
<tr>
<td>Methodological commentary on the programme</td>
<td>This section should include comments and conclusions to the methodological set-up of the programme that came up during deeper analysis of the programme in the impact assessment. These are, e.g. comments on existing indicators and their limitations; they serve as additional input for future programming and indicator selection. These kinds of observations gained during impact assessment can be compiled with expert observations about the programme set-up made previously during the initial stages of the process (analysis of the intervention logic, selection of indicators for the TIA) and summarized in this section. Methodological comments can be structured per SO/TO.</td>
</tr>
</tbody>
</table>


In addition to the scientific report, a communication paper for politicians and the general public could be prepared. This should consist of an executive summary, highlighting the main results supported by maps. If any “best practice” examples surface in the course of the TIA which could be used to make the description of impacts more “lively”, this could also be a means of conveying results. For further inputs on how to communicate the results of a TIA, refer to the communication guidance prepared by the ESPON TIA CBC project.

Results of step 5
Final scientific report on territorial impact
Communication & summaries
## Annex 1 – Common CBC indicators

### European Integration

- Waiting time due to border controls
- Duration and cost of recognition of professional qualifications
- Access to housing market cross-border (number of cross-border housing)
- Access to employment services in the neighbouring country
- Number of cross-border workers
- Number of cross-border placements (EURES)
- Access to digital systems of for cross-border workers, employers and citizens
- Development of the situation of cross-border citizens/workers/companies with respect to
  - taxes,
  - social security
  - education
  - housing
  compared to previous years
- Potential accessibility of the cross-border territory by/road/rail/air compared to previous years
- Educational attainment: number of cross-border bi-diplomas
- Number of hours of courses taken in the respective foreign language
- CB difference: Gender balance employment

### Regional competitiveness & sustainable economic development

- Cross-border territory GDP, unemployment rate
- Export in the cross-border territory
- Investments by companies in the cross-border territory
- Prices real estate
- Investment/numbers of Social Housing
- Household Income, number of households receiving social benefits
- environmental indicators (air pollution, water, land-use, biodiversity, share of renewable energy, number of cars per household)
- Number of SME/Companies with cross-border business
- Cross-border public transport connections (compared to previous years)
- Cross-border energy network connections (compared to previous years)
- Employment in different sectors (agriculture, R&I, technology...)
- Economic growth (GDP/capita)
- Economically active population per km2
- Patent applications/Mio inhabitants
- Development Regional ICT infrastructure

RCR 79 – Joint strategies/action plans taken up by organisations at/after project completion
RCR 80 – Joint pilot activities taken up or up-scaled by organisations at/after project completion
RCR 81 – Participants completing joint training schemes
## Cross-border Cohesion

The development of the cross-border governance system

The number of cross-border institutions (number of EGTC, etc.)

General Understanding neighbouring languages

Percentage of pupils/students learning the neighbouring language (different schools, higher education)

The quality of cross-border cooperation of
- Municipalities
- employment services
- educational institutions
- cultural organisations
- hospitals/ambulances
- tax authorities
- police forces
- disaster management
- public transport organisations

compared to previous years

The number of cross-border infrastructure projects in the sectors of traffic/energy (compared to past numbers)

Citizens/companies mind-set towards
- the border
- cross-border institutions
- the neighbouring region
- EU
- European Projects (INTERREG)

RCR 82 – Legal or administrative obstacles addressed or alleviated

RCR 83 – Persons covered by signed joint agreements signed

RCR 84 – Organisations cooperating across borders 6-12 months after project completion

RCR 86 – Stakeholders/institutions with enhanced cooperation capacity beyond national borders
Annex 2 – Intervention Logic Tool

The template is provided separately as an excel file:

TIA-CBC_D4_Handbook_A2_intervention-logic-tool.xlsx

The purpose of this tool is to have a structured recording of all proposals and changes within the intervention logic that are made in the steps 1-3. As depicted below, the first column will be filled with the program identified needs, followed by the program measures as described in section 2.1 and the probable effects as proposed in step 1.

In subsequent columns F-I the indicators proposed in Step 1 should be added. Any alterations and additions to that made in the workshop (step 2) will be added in column K-N.

Also based on the workshop, column P (proposed data sources) for each indicator can be filled. All further fields will be filled with the final selection, i.e. which data source was used for which indicator. If an indicator is already deemed to be assessed qualitatively, this should be noted in column V.
<table>
<thead>
<tr>
<th>Data</th>
<th>Final Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>data sources proposed</td>
<td>programme indicators</td>
</tr>
<tr>
<td>data sources used</td>
<td>common indicators</td>
</tr>
<tr>
<td></td>
<td>add</td>
</tr>
</tbody>
</table>
Annex 3 – Data Assessment Template

The template is provided separately as an excel file:

*TIA-CBC_D4_Handbook_A3_data-assessment-tool.xlsx*

The purpose is to produce a structured overview of the data available before the first workshop(s) takes place, so it can be discussed during the workshop.

In column B, it should be indicated if data is available only for one side of the border, or even for single regions. In column C a short description of datasets to be found should be entered (already linking to the indicators proposed if possible). In column C, any apparent shortcomings should be noted, such as time gaps, usability etc.
## Annex 4 – Impact Assessment Matrix

The template is provided separately as an excel file:

*TIA-CBC_D4_Handbook_A4_impact-assessment-matrix.xlsx*

The matrix will accompany the whole process of the TIA, being filled with information piece by piece. As soon as indicators are fixed in Step 3, each indicator has to be named in the matrix in column A. For each indicator, a complete matrix is available with columns for each region. For the first indicator, quantitative values are entered in line 3-6, qualitative assessments (workshop 2) in line 7 and 8. Justifications and notes should be extensive, as these matrices will be annexed to the final report and enable the replicability of results. Every time an estimation method is used, this has to be noted as well.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Indicator</td>
<td>Assessment method</td>
<td>Region 1</td>
<td>Region 2</td>
</tr>
<tr>
<td>3</td>
<td>Quantitative</td>
<td>Value T0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Value T1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Gross impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Net impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Qualitative</td>
<td>Magnitude (0-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Direction against baseline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Temporal distribution (short/medium/long term)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Justification, Notes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11</th>
<th>Indicator</th>
<th>Assessment method</th>
<th>Region 1</th>
<th>Region 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Quantitative</td>
<td>Value T0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>Value T1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>Gross impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Net impact</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex 5 – Estimation methods

If the required regional granulation is not given

If no regionalization of net impacts via output- or expenditure data is possible, the most common practice for regionalization is to make use of other proxy indicator(s) available at both the level of the dataset and the level of the required regional granulation. The choice of the proxy indicator(s) has to be well justified, establishing a clear link to the data to be regionalized, as otherwise while mathematically possible the calculations will fail to accurately depict the reality. A technique which is applied e.g. in calculating missing data on the regional level for the regional innovation scoreboard is applied as follows, shown on the example of regionalizing an indicator on innovation in firms (available at NUTS 2 level) with employment and number of firms at the two digit industry level (available at both NUTS 2 and NUTS 3 level), assuming that industry intensities at the country level also hold at the regional level). We explain the method using the share of firms with product and process innovations as an example:

• Step 1: Calculate for each NUTS 2 region Y the share of firms with product and process innovations for each industry I: PI_Y_I
• Step 2: Identify the employment share of industry I for NUTS 3 region R: EMPL_R_I
• Step 3: Calculate the estimate for the share of firms with product and process innovations by multiplying EMPL_R_I with PI_Y_I: PI_EMPL_R_I
• Step 4: Identify the share of local units (enterprises) of industry I for region R: ENTR_R_I
• Step 5: Calculate the estimate for the share of firms with product and process innovations by multiplying ENTR_R_I with PI_Y_I: PI_ENTR_R_I
• Step 6: Calculate the average of PI_EMPL_R_I and PI_ENTR_R_I as the estimate for the regional share of product and process innovators: PI_R_I

If only one proxy indicator is available, the results can still be usable if the indicator choice is well justified, however robustness of the approach is increased by using two proxies and calculating the average values.

If there are temporal data gaps

For those gaps, depending on the type, a number of common techniques are available for producing estimations. Those techniques should only be used to calculate data for either the baseline point or for data between the baseline point and the most recent available point in time. They should never be used to estimate the future development within a CBC TIA. Some techniques as also applied by the Regional Innovation scoreboard\(^9\), listed in descending order of preferability are:

1. At the NUTS 3 level, if data for both the previous and the following year is available, first the average of both years can be used \(X_{R}^{T} = \frac{(X_{R}^{T-1} + X_{R}^{T+1})}{2}\), then, if the previous step is not possible, that of the previous year \(X_{R}^{T} = X_{R}^{T-1}\), and finally, if the previous step is not

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\(^9\) See EUROPEAN COMMISSION 2017: Regional Innovation Scoreboard 2017

\(^{10}\) Ibid.
possible, that of the following year $X^T_R = X^{T+1}_R$, where $R$ denotes the NUTS 3 region, $T$ the current year, $T-1$ the previous year, and $T+1$ the following year. If data are not available for the previous and following year, missing data will not be imputed.

2. If regional data is available for the previous year, the ratio between the corresponding NUTS 3 level and that at NUTS 2 level for the previous year is multiplied with the current value at the higher aggregate level: $X^T_R = \left(\frac{X^{T-1}_R}{X^{T-1}_Y}\right) \times X^T_Y$, where $R$ denotes the NUTS 3 region, $Y$ the NUTS 2 region (as the higher aggregate level), $T$ the current year, and $T-1$ the previous year.

3. If regional data for the previous year is not available, the same procedure as in step 2 can be applied using the ratio between the corresponding NUTS 3 level and that at NUTS 2 for the following year: $X^T_R = \left(\frac{X^{T+1}_R}{X^{T+1}_Y}\right) \times X^T_Y$, where $R$ denotes the NUTS 3 region, $Y$ the NUTS 2 region (as the higher aggregate level), $T$ the current year, and $T+1$ the following year.

4. If there are no regional data for neither the previous nor the following year, the higher-level aggregate can be used (NUTS 2 for NUTS 3 regions), first that for the current year, and, if not available, that for the previous year, otherwise that for the following year: $X^T_R = X^T_Y$ or $X^T_R = X^{T-1}_Y$ or $X^T_R = X^{T+1}_Y$, where $R$ denotes the NUTS 3 region, $Y$ the NUTS 2 region (as the higher aggregate level), $T$ the current year, $T-1$ the previous year, and $T+1$ the following year.

The fourth option however is limited to relative data (total numbers naturally cannot be imputed in that way) and also has to applied with extreme caution. This is especially critical as a CBC TIA will deal with relatively short term effects given the envisaged point in the programming period to conduct it, thus severely limiting the reliability of data from different years. Performing imputations over more than 1 year should be avoided in any case. Again, it is preferable to have an indicator assessed qualitatively by an expert panel, than to produce non-sound estimations.
Annex 6 – Indicator data production through qualitative methods

Production of qualitative indicators with a survey/questionnaire

To get a more comprehensive picture of certain trends related to the qualitative indicators presented in the methodology, the final expert judgement (produced in workshops) should be supplemented by results from a survey. The survey should be launched a couple of weeks before the scheduled expert workshops with an online questionnaire. It will be in the first place the programme secretariat who can deliver a list of potential experts/stakeholders who could be asked to fill in the questionnaire. The target group of this survey goes beyond the realm of INTERREG experts. It would be the added-value of the survey that a broader group of persons with knowledge on cross-border activities can give their view on certain developments. Meaning for instance, that citizens, representatives of companies, scientists, politicians or civil servants should assess the general trends of cross-border cooperation beyond INTERREG related activities. This could also guaranty a wider picture and could be a valuable input for the following expert session.

The list of questions of the survey should follow the list of qualitative indicators described as common indicators and should be adapted with respect to the quality of the individual programme.

<table>
<thead>
<tr>
<th>Question</th>
<th>Rating 0-4</th>
<th>Explanations/Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do you assess the quality of cross-border cooperation of public sector bodies in 2018 compared to 2014?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How do you assess the quality of cross-border cooperation of companies in 2018 compared to 2014?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How do you assess the cross-border governance structure in 2018 compared to 2014?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How do you assess the obstacles in the field of taxes that concern cross-border workers and companies?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How do you assess the obstacles in the field of social security that concern cross-border workers and companies?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Organizing a workshop “production of qualitative data and trend analysis”

Within such an additional workshop, a trend analysis setting the frame for qualitative net impact assessment in step 4 can be developed. It acts as an additional input to the programme background against which the net impacts on a regional level can be determined.

Participants can (partly) be the same as for workshop 1, however some differing guidelines can be given:

- Participants should be regional and/or thematic experts as described for workshop 1
- When Programme stakeholders participate to the expert panel, it has to be considered that on one hand there could be a conflict with the objectivity of the process and constitute a self-assessment. However, in this second expert workshop the focus will
be on the production of qualitative data and not on the impact of the INTERREG programme. Usually, programme stakeholders know a lot about the general development of the programming area.

- The selection of participants has to be based on the framework of the programme, taking into special consideration the indicators to be assessed. The thematic fields and regional distribution of those indicators will determine, if a broader spectrum of thematic experts (e.g. members of the scientific community) or regional experts (e.g. regional authorities, NGOs etc.) is necessary, to capture the programme impact.

- Ideally, 12-15 participants are envisaged

**Workshop preparation**

In order to enable the expert panel to make an informed decision, all suitable pieces of information on quantitative and qualitative indicators should be made available to them. These include the verified intervention logics as an outcome of the first workshop and context data presented there (especially output- and expenditure data and maps) as well as any additional information that can be given based on step 3 and already established net impacts for quantitative indicators. A useful tool for presenting the information in a structured manner is the IAM (filled to the extent possible). The most important input for the workshop is a presentation of the results of the survey and the qualitative data produced.

In order to describe the different trends (2014 vis-a-vie 2018) maps, tables or posters can be used with respect to the qualitative indicators. Interesting perceptions/experiences produced by the survey should be also presented.

**Conducting the second workshop**

The guiding questions for the workshop are the questions of the questionnaire. The debate can be done in subgroups (dependent on the size of the group) and being steered by the following structure:

- Discussion on the result of the survey per indicator: does the assessment of the survey correspond to the own perception? Is there a regional aspect related to the own assessment or a particular institutions or cooperation experience?

- Discussion on the experiences described from the survey participants: Do they correspond to the own experiences?

- Filling in own assessments with respect to the qualitative indicators and discussing own experiences with illustrative examples. The different subgroups should agree on a common assessment of the development based on an exchange of views and experiences

- The workshop organizers develop a “trend analysis” per sector, or theme (based on the debate in the workshop). This “trend analysis” shall be finally discussed and commented by the participants.

- After the workshop, the researchers prepare the documentation, presenting the qualitative data (survey and workshop) and producing a “trend analysis”.

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11 As an inspiration for the extended methodology, some elements of the “participative Method for Impact Assessment of Programmes and Projects (MAPP)” was used applied in the field of development policy. The methodology was developed by Susanne Neubert, scientific staff of the German Development Institute in Bonn. Especially the use of the term “trend analysis” and the respective presentation
To complete the tasks in the workshop, half a day could be enough.

**Table A.2: Sample agenda of a workshop**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:15</td>
<td>Introduction and welcoming round</td>
</tr>
<tr>
<td>9:30</td>
<td>Recap of the workshop goals, key information presentation</td>
</tr>
<tr>
<td>10:30</td>
<td>Qualitative Indicators: the development according to the survey and broader debate of the own perception</td>
</tr>
<tr>
<td>11:15</td>
<td>Coffee break</td>
</tr>
<tr>
<td>11:30</td>
<td>Qualitative indicators: producing data related to the qualitative indicators by the workshop participants</td>
</tr>
<tr>
<td>12:45</td>
<td>Summary of the workshop findings</td>
</tr>
<tr>
<td>13:00</td>
<td>End of the Workshop</td>
</tr>
</tbody>
</table>

The final trend analysis can be presented in the form of the following exemplary table, which has been structured along the common indicators of the CBC TIA project:

**Table A.3: Trend analysis**

<table>
<thead>
<tr>
<th>Improvement of...</th>
<th>2014-2018</th>
<th>Explanatory note</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Situation of cross-border workers/Companies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment services for cross-border</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Workers</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>– Employers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Obstacles due to taxes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Workers</td>
<td>2</td>
<td>differing regional perceptions, differing perception per sector, if documented in survey or workshop</td>
</tr>
<tr>
<td>– Employers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstacles due to social security</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Workers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>– Employers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General understanding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Languages</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Quality of cross-border cooperation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation of public sector bodies</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cross-border governance</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
</tbody>
</table>

The results of these data production exercises can act as an input for the following workshop in step 4.

was inspired by the methodology. See: Susanne Neubert, Description and Examples of MAPP, Method for Impact Assessment of Programmes and Projects, Lusaka, 2010.
The ESPON EGTC is the Single Beneficiary of the ESPON 2020 Cooperation Programme. The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States and the Partner States, Iceland, Liechtenstein, Norway and Switzerland.