Cumulative Impact Assessment: A Living Process

Juan Carlos Páez Zamora

Director ESG – Infrastructure and Industrial processes - IDB Invest

Ecuador – United States of America

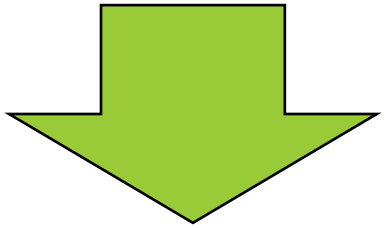
juancarlosp@iadb.org

https://www.linkedin.com/in/juan-carlos-p%C3%A1ez-zamora-32426634

https://idbinvest.org/

Two different ways to perform a CIAM

From the Planner's Perspective



How various actions (projects) will affect a predetermined VEC or group of VECs in a preset area in predefined time

From a Project's Perspective

ESIA

Contents of an ESIA

- **Project Description:** location, size, scope, objectives, expected outputs, development phases, construction or implementation methods, quantities or volumes of work.
- **Area of Influence:** territory where the effects (positive and negative) of the project are expected.
- **Baseline Conditions:** characteristics of the environmental, social, and economic conditions of the project's area of influence.
- **Impact Assessment**, identification and evaluation of the potential impacts (positive and negative).
- **Management Measures**, list of actions to avoid, reduce, minimize, or compensate for undesired or enhance positive impacts.
- **Management Plans**, a description of how and when the management measures are to be implemented

Degree of uncertainty while developing the ESIA components

Component	Degree of uncertainty*	Comment
Project Description	Negligible	Project details are usually known beforehand, as they are part of its final design.
Identification of the project's area of influence	Slight	However, if a well-experienced team is appointed to undertake this task, this uncertainty can be practically nullified.
Baseline Conditions	Negligible to slight	This depends on the type of information used (e.g., primary-secondary; old-new; detailed-general).
Impact Assessment	Slight to material	This depends on how the previous components have been performed.
Management Measures	Slight to material	This depends on how the impact assessment has been done.
Management Plans	Slight to material	This depends on how the management measures have been developed.

Probability of an ESIA's components requiring updates

Component	Probability of needing an update*	Comment
Project Description	Very unlikely to unlikely	Very unlikely as any modification in the project design has associated transactional costs that are usually not welcome. However, when major modifications are introduced, it is likely that the whole environmental and social analysis will have to be redone.
Identification of the project's area of influence	Unlikely to likely	Even if some minor project characteristics are introduced, this area tends not to vary.
Baseline Conditions	Likely to very likely	This is very common when there is a material lapse between the time in which the ESIA is completed and the time the project is executed; when better information becomes available, or when there has been a substantial in the behavior of the environmental components initially identified.
Impact Assessment	Likely to very likely	If the proposed project and/or baseline conditions change, it is likely that the impact assessment needs to be updated.
Management Measures	Likely to very likely	If the impact assessment has been updated, it is likely that the management measures will also need to be updated as they depend directly on the impact analysis.
Management Plan	Likely to very likely	If the management measures have been updated, it is likely that management plans will also need to be updated as they depend on the former.

Contents of a CIAM

- Selection of **VECs**.
- Determination of **temporal and spatial boundaries** for the analysis.
- **Determination of past, ongoing, and future projects** that will be considered in the analysis.
- Determination of the (current) **baseline status of the selected VECs**.
- **Assessment of the cumulative impacts** generated by the projects included in the analysis.
- Design of **measures to manage the cumulative impacts** on each affected VEC.

Setting-up the list of future projects for the CIAM

- Its sponsor or representative has requested authorization to initiate the relevant **environmental licensing process**.
- It is included in **the inventory of priority** initiatives to be carried out in the coming years.
- It is part of the **political speech**.
- Has the necessary **financing** for its implementation.
- Authorities have submitted a **credit request to a financial institution** to finance it.
- Has a **strong community support**.
- A **procurement timetable** for the acquisition of goods and services required by the project has been posted.

Degree of uncertainty while developing the CIAM components

Component		Degree of uncertainty	Comment
Selection of VECs		Negligible	VECs are usually selected by the authorities, through public consultation, by the team performing CIAM, or a combination of these.
Determination of temporal and spatial boundaries	Temporal boundaries	Negligible to slight	The future timeline boundary is usually set by legislation or by common agreement (not more than 15 years), while past timeline is commonly set by how the VECs have behaved in the past (usually no more than 5 years).
	Spatial boundaries	Negligible to slight	Spatial boundaries are usually set by the authority requiring CIAM. When CIAM is performed from a project perspective, the spatial boundary is the project's area of influence.
Determination of past, ongoing, and future projects, activities, and external stressors	Past, projects, activities, and external stressors	Negligible	If their effects are not already factored into the baseline analysis, this identification is simple and has a very high degree of confidence.
	Ongoing projects, activities, and external stressors	Negligible	This identification is simple and straight forward: projects are there and, in the worse-case scenario, can be visited if needed.
	Future projects, activities, and external stressors	Important to high	This is the activity that involves the highest uncertainty of the process, since determining when a project will be executed in the future depends on son many variables that are beyond the control of CIAM.

Degree of uncertainty while developing the CIAM components

Component	Degree of uncertainty	Comment
Determination of the baseline status of the selected VECs	Negligible to slight	Just like an ESIA, an update to the baseline may be needed when new information becomes available, or when there has been a substantial change in the behavior of the VECs.
Assessment of cumulative impacts	Important to high	The uncertainty generated by the identification of future projects to be considered in CIAM is carried out to this process.
Design of measures to manage the cumulative impacts	Important to high	The uncertainty generated by the identification of future projects to be considered in CIAM is carried out to this process.

Probability of CIAM components requiring updates

Component		Probability of needing an update*	Comment
Selection of VECs		Very unlikely	VECs are usually selected by the authorities, through public consultation, by the team performing CIAM, or a combination of these and normally do not change.
Determination of temporal and spatial boundaries	Temporal boundaries	Very unlikely	The future timeline (not more than 15 years) and past timeline boundaries (not more than 5 years) and normally do not change.
	Spatial boundaries	Very unlikely to unlikely	Spatial boundaries are usually set by the authority requiring CIAM and normally do not change. However, when CIAM is performed from a project perspective, and having in mind that the spatial boundary is the project's area of influence, it is unlikely to be changed.
Determination of past, ongoing, and future projects, activities, and external stressors	Past projects, activities, and external stressors	Very unlikely	If their effects are not already factored into the baseline analysis, this identification is simple and has a very high degree of confidence. Unless new information is available, the list of past projects does not change.
	Ongoing projects, activities, and external stressors	Unlikely	"Ongoing projects" may change to be "past projects" as time passes. However, their effects are usually already considered in CIAM.
	Future projects, activities, and external stressors	Likely to very likely	The list of future projects needs to be updated as new information is available. Even in the best-case scenarios, where the list has been determined with a very high degree of certainty, it is often very difficult to determine when such projects will be implemented.

Probability of CIAM components requiring updates

Component	Probability of needing an update*	Comment
Determination of the baseline status of the selected VECs	Unlikely to likely	Just like an ESIA, this depends on the type of information available (e.g., primary-secondary; old-new; detailed-general). When CIAM is performed from a project perspective and has not been done as a part of an ESIA or immediately after it, depending on the circumstances, it might be necessary to update the baseline.
Assessment of the cumulative impacts	Likely to very likely	As the assessment depends on the baseline conditions of the VECs (which is somehow likely to change) and the projects to be considered (likely to very likely), changes in these requires the assessment to be updated.
Design of measures to manage the cumulative impacts	Likely to very likely	As the design of these measure depends on the assessment of cumulative impacts, changes in the latter require the former to be updated.

CIAM needs to be periodically updated

A CIAM should be reviewed at least annually to determine:

- Any change in a VEC baseline.
- The status of the future projects considered or not in the analysis, but with a direct connection to one of the selected VECs.
- Any other situation that may have influenced the way the exercise was performed.
- The need for its updating.

CIAM is a living document!


thank you
danke
merci
gracias
obrigado
bedankt
dziękuję
go raibh maith agat
mochchakkeram
teşekkür ederim
ngiyabonga
спасибо
рахмат
謝謝
Баярлалаа
dank je
tapadh leat
sukriya
kop khun krap
terima kasih
dakujem
arigatô
grazie
takk
taiku
sagolun
mauruuru
hvala
dankie
kiitos
dhanyavad
faafetai lava
vinaka
blagodaram
misaotra
matondo
paldies
grazzi
mahalo
barka
welalin
tack
mersi
spas
kia ora
akun
dankon
aciû
köszönöm
gràçie
bayarlalaa
nandri
nanni
enkosi
sobodi
dèkuji
mèsi
didi madloba
najis tuke
kam sah hamnida
rahmat
তোমাকে ধন্যবাদ
감사합니다
xièxie
ευχαριστώ
diolch
rahmet
tanemirt
ありがとう
gratias ago
gràcies
chnorakaloutioun
sulpáy
djiere dieuf
tau
дякую
mamnun
chokrane
murakoze
tenki
obrigada
asante
manana
хвала
trugarez
мерси
mercé
shukriya
dhanyavadagalu

Let’s continue the conversation!

Post questions and comments in the IAIA24 app.

#iaia24

Juan Carlos Páez Zamora

Director ESG – Infrastructure and Industrial processes - IDB Invest

Ecuador – United States of America

juancarlosp@iadb.org

https://www.linkedin.com/in/juan-carlos-p%C3%A1ez-zamora-32426634

https://idbinvest.org/