

# **Data triangulation workshop Key findings**

Tallinn, Estonia  
24 May 2011

**Report**

## **Table of Contents**

LIST OF ACRONYMS .....	3
FOREWORD .....	4
EXECUTIVE SUMMARY.....	5
1. Introduction.....	7
2. Findings from the Case-Studies .....	8
3. Key Issues and Lessons Learned .....	11
4. Overall Conclusions and Lessons Learned.....	16
ANNEX 1.....	18
ANNEX 2.....	19

## LIST OF ACRONYMS

<b>BSS</b>	<b>Behavioural surveillance survey</b>
<b>CDC</b>	<b>United States Centers for Disease Control and Prevention</b>
<b>CIS</b>	<b>Commonwealth of Independent States</b>
<b>ECDC</b>	<b>European Center for Disease Prevention and Control</b>
<b>FSWs</b>	<b>Female sex workers</b>
<b>GFATM</b>	<b>The Global Fund to fight against AIDS, TB, and Malaria</b>
<b>IDU</b>	<b>Injecting Drug Users</b>
<b>IRB</b>	<b>Institutional Review Board</b>
<b>MARPS</b>	<b>Most at risk populations</b>
<b>MoT</b>	<b>Modes of Transmission (studies)</b>
<b>MSM</b>	<b>Men who have sex with men</b>
<b>NGO</b>	<b>Nongovernmental organization</b>
<b>NIHD</b>	<b>National Institute for Health and Development</b>
<b>PEPFAR</b>	<b>The United States President's Emergency Plan for AIDS Relief</b>
<b>UCSF</b>	<b>University of California, San Francisco</b>
<b>TWG</b>	<b>Thematic Working Group</b>
<b>UNAIDS</b>	<b>Joint United Nations Programme on HIV/AIDS</b>
<b>UNODC</b>	<b>United Nations Office on Drugs and Crime</b>

## FOREWORD

The report on “Key findings of the data triangulation workshop” documents the efforts led by Estonia, Ukraine and Republic of Moldova and supported by WHO in 2010 and 2011 to improve the understanding of key questions related to their HIV epidemics, and measure outcome and impact of the scale-up of interventions among key populations in particular.

We hope that the findings are found useful in terms of succinctly describing the processes and results that came out of the triangulation exercise illustrated in this report, to be used by other countries in further strengthening their capacities in this important area of the improvement of national HIV responses.

We wish to extend our gratitude first to the technical individuals from the different countries and in particular to all the workshop participants and the institutions or organizations they represent, and to the joint efforts of all supporting agencies or institutions (the Global Fund to fight against AIDS, TB and Malaria (GFATM), the Joint United Nations Programme on HIV/AIDS (UNAIDS) and UNAIDS Regional Support Team (RST), the United Nations Office for Drugs and Crime (UNODC), the Centers for Disease Control and other US Government partners from the United States President's Emergency Plan for AIDS Relief (PEPFAR), academic and teaching institutions such as the University of California, San Francisco (UCSF), and the WHO Collaborating Centre for Capacity Development in HIV Surveillance, School of Medicine, Zagreb, Croatia).

This pre-conference workshop to the 2011 Conference for HIV in the European Region was planned and made possible by the Conference organizers, in particular Kristi Rüütel, and the WHO Collaborating Centre for Capacity Development in HIV Surveillance, in particular Ivana Bozicevic and their relentless efforts to build capacity in HIV surveillance in the Region, and WHO headquarters, HIV Department, Cyril Pervilhac with the support of Ulrich Laukamm-Josten at the WHO Regional Office for Europe, and Lev Zohrabyan at the UNAIDS Regional Support Team, Europe and Central Asia. For the report writing, we thank the support of Kristi Rüütel (Estonia), Olga Varetska (Ukraine), Stelan Bivol and Alexandrina Iovita (Republic of Moldova), Ruichi Komatsu (the Global Fund to fight against AIDS, TB, and Malaria), and Ivana Bozicevic (WHO Collaborating Centre for Capacity Development in HIV Surveillance, School of Medicine, Croatia) and Cyril Pervilhac (WHO headquarters/ HIV Department) who have led the process.

Copenhagen and Tallinn, 7 June 2011

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## EXECUTIVE SUMMARY

This report presents the key findings of the pre-conference workshop which aimed to describe the process and results of the current HIV triangulation activities in eastern Europe (Ukraine, Republic of Moldova, Estonia), and to discuss the needs, opportunities and benefits of carrying out, scaling-up and supporting HIV data triangulation in this subregion.

The workshop took place prior to the AIDS 2011 conference in Tallinn, Estonia. More than 20 participants exchanged their findings and views in a half day workshop led by WHO, with the collaboration and support of key partners (WHO Collaborating Centre for Capacity Development in HIV Surveillance/ School of Medicine, UNAIDS, UNODC, GFATM, USG partners, European AIDS Treatment Group) and countries from eastern Europe.

The three countries presented their key questions and findings and are reported briefly as well as key issues and themes structured around:

- Ethics and data access,
- Analysis and expertise needed,
- Use of findings and policies,
- Capacity-building, and
- Financial resources and opportunities.

The report summarizes further these findings based on the discussion. To further support HIV data triangulation in this subregion the key conclusions can be summarized as follow:

- Triangulation is seen as a **valuable and feasible approach** to understand some of the important questions countries wish to answer related to various facets of outcome and impact of programmes
- Consensus that there is in general **no need of additional ethics clearance** because triangulation is largely based on secondary data analysis or using existing data
- Early on the national country authorities need to bring on board all stakeholders to participate in the analysis of their data, and if not at least to **share their raw data**, as well as to bring in the **programme managers and policy-makers**
- All countries have the capacity to carry out the basic **trend analysis** needed to look at data retrospectively. In order to do **more advanced analysis and triangulate data sources and come to conclusions**
- Depending on the complexity of questions to answer, the overall process may take a few weeks to several months. Two approaches therefore may be foreseen:
  - 1) capacity-building comprehensive triangulation over a 3 months to 1 year period address several key questions, spread the work at the pace of the national programmes backed-up on an ad-hoc basis by additional outside technical capacity if necessary. This is the approach that the 3 countries have used in these case studies.
  - 2) fast track focused triangulation (e.g. GFATM performance review): within 2-4 weeks period address and focus on 1 or 2 key questions, block 2-4 weeks of expertise in-country and if necessary backed-up by out-of-country expertise. This is the approach countries may wish to follow in the near future.

- Triangulation on the long term should be part of **on-going work with built-in cost** to analyse better the data as part of health systems strengthening and to strengthen national programmes and planning.
- A **resource guide specific to concentrated epidemics** with relevant case studies is needed as a resource and learning tool for the countries affected.

# 1. Introduction

Triangulation is broadly defined as synthesis and integration of data from multiple sources through collection, examination, comparison, and interpretation. It is used to answer different questions, ranging from explaining the trends and the levels of the HIV epidemic to assessing the population impact of HIV prevention and treatment programmes. Triangulation offers many advantages over conventional analyses. Firstly, triangulation can make use of pre-existing data sources. This allows for rapid understanding of the situation and facilitates timely and appropriate decisions during health crises. Secondly, as the information examined is collected by different methods, by different persons and in different populations, findings cross-validate conclusions and corroborate interpretations. The process thereby reduces the effect of systematic bias and random error that may be present in a single study.

The data triangulation workshop (Annex 1 Programme) allowed to present key principles and methods used in HIV data triangulation (as per above and presented in introduction at the workshop by WHO Collaborating Centre for Capacity Development in HIV Surveillance, Andrija Stampar School of Medicine, Zagreb, Croatia. This institution launched the process of capacity-building in triangulation at the regional level with a 5-days “Training course in Data Triangulation” with 30 participants from 12 countries (eastern Europe, Africa and Asia) in February 2010. Several countries have already been engaged on discussions regarding triangulation under support and guidance from various institutions (e.g. Republic of Moldova, mid-2009 with the UNAIDS Regional Support Team (RST)).

The key findings of the case-studies (section 2) in Ukraine, Republic of Moldova and Estonia which took place over the past year are presented next briefly (without the various trends analysis/slides). The final report for Estonia is available separately.<sup>1</sup> For both Ukraine and Republic of Moldova, the interim reports are expected in June 2011. The final reports are expected for Republic of Moldova in the early part of the 2<sup>nd</sup> semester 2011, and for Ukraine, which will incorporate 2011 survey data, by the end of the year.

The workshop allowed to exchange on key issues and themes around triangulation for each country (section 3.1), and to draw lessons on the best way forward for HIV data triangulation in eastern Europe (section 3.2), as documented next namely on:

- Ethics and data access,
- Analysis and expertise needed,
- Use of findings and policies,
- Capacity-building, and
- Financial resources and opportunities.

The target audience for the workshops were professionals (public health experts and epidemiologists) who are interested in carrying out HIV data triangulation in their countries. In addition, the target audience included managers of National AIDS Programmes, experts from WHO, UNAIDS and other United Nations agencies, and funding agencies (GFATM and bilateral donors). Over 20 participants enriched the exchanges and discussions (Annex 2) and are thanked here for their participation.

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<sup>1</sup> “*HIV Epidemic in Estonia: Analysis of Strategic Information Case Study*”, Tallinn, 2011, available at: [www.tai.ee](http://www.tai.ee)

As a rapid overview of the key findings of this workshop, the overall conclusions and lessons learned are summarized at the end (section 4).

## 2. Findings from the Case-Studies

The 3 countries documented the following findings as summarized next -without presenting the trends analysis.<sup>2</sup>

### 1) Ukraine

Key questions:

- What are the current patterns of HIV transmission in Ukraine?
- By different geographic regions in Ukraine? By different risk groups?
- Is the epidemic generalizing: (moving from concentrated in certain groups to sustained heterosexual transmission)?
- Are prevention programmes, policies, strategies, and resources correctly aligned with the epidemic patterns?
- Is there evidence that they are working? How should they be realigned?

Key findings:

There are no clear indications of the generalization of the HIV epidemic in Ukraine despite increasing numbers of HIV cases being reported:

- In HIV case reporting, the reported heterosexual mode of transmission (54% of all new HIV cases in 2009) is likely to contain people infected through other modes (especially among males):
  - through homosexual contacts (the discrepancy between Behavioural Surveillance Surveys (BSS) data and Men who have sex with men (MSM) case reporting suggests a large degree of underreporting of MSM cases and transmission) and
  - injecting drug use (IDU) (at least 25% of new HIV+ males in 2007 – 2008 were IDU based on Hepatitis C seropositivity among a large sample)
- The number of newly registered HIV cases among heterosexual women younger than 25 years of age has decreased slightly since 2007; this suggests decreasing incidence in this age group
- The increase in total newly reported cases in the last two years is due to increased numbers of new cases with advanced immunodeficiency suggesting delayed diagnosis rather than new transmission associated with increase.
- There are indications that higher levels of coverage of prevention programmes for IDUs and Female sex workers (FSWs) are associated with declining prevalence in IDUs and FSWs younger than 25
- There are indirect indications that the large heterosexual epidemic in Ukraine is primarily the result of sexual transmission from IDUs to their sexual partners as

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<sup>2</sup> Presentations are available upon request to the country presenters- see Annex 1

opposed to true generalization of the epidemic. Thus in terms of programme applications:

- increased emphasis on prevention of sexual transmission of HIV for IDUs
- increased treatment access for IDUs (currently very low).

## **2) Republic of Moldova**

Key questions:

1. What are the tendencies of the HIV epidemic evolution in Republic of Moldova?
  - Migration/mobile populations
  - Determinants of the epidemic in the rural sector
  - Youth
  - Most at Risk Populations (MARPs).
2. What is the impact of HIV prevention interventions in MARPs, youth and migrants?

Key findings:

1. What are the tendencies of the HIV epidemic evolution in Republic of Moldova?
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  - Youth
  - MARPs.
2. What is the impact of HIV prevention interventions in MARPs, youth and migrants?

Q1: Epi. background -what does case registration tell us?

New HIV cases Republic of Moldova 2004-2009

- Epidemic among males, urban
- Decreasing trend in IDU mode of transmission
- Important increases for females, rural
- Shift from youth to older ages
- Since 2005, route of transmission predominantly heterosexual.

HIV due to IDU

- Primarily male, urban
- Shift to older age groups, particularly for one of the two regions of the country (Left Bank region)
- Less claim of mobility as cofactor, except for Left Bank.

HIV and migration

- Estimated 500 000 Moldovans work abroad while remaining members of Moldovan households
  - 63% are employed in Commonwealth of Independent States (CIS) countries
  - 66% are male
  - 33% are younger than 30 years old
  - 78% are from rural areas
- Among new HIV cases, migration is strongly associated with becoming infected with HIV

- Male migrants are at increased risk of infection (36%-45%).

#### HIV among youth

- Females predominate in new cases
- “Older” youth predominate
- IDU declining as mode of transmission
- Strong migration trend among youth
- Findings are supported by behavioural indicators from General Population Survey, 2009.

#### Results, impact of interventions in IDUs: Changes in high risk injection behavior

- Frequency of injection per months is dropping from 24 in 2004 to 12 in 2009
- Percentage of people sharing syringes is dropping from 19% in 2004 to 10% in 2009
- >90% of all injections are with sterile equipment in 2009
- Increase of knowledge of HIV prevention among beneficiaries of HR programmes from 37% in 2004 to 64% in 2007.

#### Results, impact of interventions in IDUs: No changes in high risk sexual behavior

- Number of sexual partners is higher than in general population and has not changed between 2004 and 2009
- Condom use during last intercourse is low among IDU
- Due to higher risk sexual behavior HIV is spreading to regular sexual partners (MoT study, 2010).

### 3) Estonia

#### Key questions:

- Is HIV transmission decreasing, increasing or stable?
- What are the main transmission routes and have there been any changes over the years?
- Are vulnerable populations – e.g., IDUs and their sexual partners – more affected by HIV or is it also spreading more in the general population, too?

#### Key findings:

- Evidence-based findings on available data and trends analysis of the newly diagnosed HIV-cases and prevalence rates among key-populations (especially people who inject drugs) show that at the national level the HIV transmission is slowly but steadily decreasing
- The number of cases related to IDU behaviour (IDUs and their sexual partners) still exceeds the number of cases among general non-injecting population and the HIV epidemic is still concentrated
- The sexual risk behaviours among general population have somewhat decreased over the last ten years (as well as STI rates)
- If these trends continue and the IDU epidemic is further controlled, the epidemic will not further develop into a generalized one.

### **3. Key Issues and Lessons Learned**

#### **3.1 By country**

For the 3 countries those can be summarized as follow:

##### **1) Ukraine**

- HIV case reporting does not reflect the actual burden of the epidemic among MSM in Ukraine – which results in lack of sufficient data to analyse this mode of transmission
- There is a need to assess validity of self-reported mode of HIV acquisition in HIV cases in order to better interpret the data from HIV case reporting system
- Continuous focus should be made on representativeness of population-based surveys using RDS and other methods by ensuring supervision of NGOs that implement these surveys
- Trends in HIV prevalence among young IDUs suggest a success in HIV prevention
- Due to possible inconsistencies in HIV prevalence trends in older IDUs, there is a need to assess to what extent declines in HIV prevalence are due to mortality in IDUs i.e. low ARV coverage
- Analysis by regions and age groups is of key importance.

##### **2) Republic of Moldova**

- Multiple data sources: bio-behavioural prevalence data, general population studies, STI database, HIV new cases, HIV testing database
- Routine statistics have more potential for data analysis than usually performed and provide more depth about HIV tendencies, data quality assurance imperative in this context
- Additional data points: parallel processes of Modes of Transmission (MoT) and Prevention Evaluation
- Triangulation helped produce an inventory of all data sources and assess data limitations
- Triangulation helped build capacity to interpret data
- Harmonization of data collection tools in HIV surveillance and routine HIV case reporting to meet data requirements for future Data Triangulation and Modes of Transmission studies
- Consistent use of probabilistic sampling methods among the same populations to ensure comparable data for trend analysis
- Electronic case reporting would improve data analysis possibilities
- Use comprehensive data analysis to describe HIV epidemic in country and main epidemic determinants
- Use of findings from data triangulation, MoT and Prevention evaluation in refining the national targets and resource allocation in new National Strategic Plan.

##### **3) Estonia**

Data access and ethics:

- Analysis led and carried out by the Estonian National Institute for Health Development (NIHD) and Ministry of Social Affairs
- National organizations: access to almost all data

- Some difficulties with data related to health care services (no central and systematic data collection on certain issues)
- No need for ethics clearance: secondary analysis.

Analysis and expertise needed:

Mainly retrospective trends analysis

Mix expertise with inputs in various sections/ chapters:

- Youth & general population, MSM, SW and prisoners (NIHD)
- IDU (MoSA, NIHD)
- General epidemiology, HIV testing, PLHIV, HIV/TB, STI, and overall coherence, writing (NIHD)
- General guidance and review (WHO headquarters/ HIV department, Geneva)
- Additional inputs: national reviewers and consultants (n=28), and international reviewers and consultants (n=9).

Use of findings and policies:

- Immediate use of findings with the primary owners of the various data sources (queries with the analysis, interests and discussing trends and their meanings)
- Examples of immediate change of policies (e.g., HIV testing guidance)
- Guidance and input for priority setting (national action plan for 2013–2015)
- One of the main tool to support and inform the national evaluation (Fall 2011).
- Large scale triangulation case studies could be conducted every 3–5 years (in parallel with national planning for response)
- Need for more in-depth analysis of specific topics
- Systematic analysis and recording of the situation, needs, data quality and gaps, etc.

### **3.2 Key findings and summary by themes**

#### **1) Ethics and Data access**

##### **Ethics**

- Consensus that there is in general no need of additional ethics clearance because triangulation is based on secondary data analysis or using existing data
- The principle behind is that data can be accessed and analysed when no personal identification is needed, but there are some special situations handled on a case by case basis by each country.

Additional considerations:

- In Ukraine, there was no national issue for ethics but due to CDC internal rules and funding the study had to go through the CDC Atlanta Institutional Review Board (IRB) board approval which created some delays in the process
- In Estonia there have been issues related to linking data from national registries (with name identification), the NIHD has applied for a general license to the data protection agency that allows linking data from national registries
- In Lithuania, when using personal data, there is a need for additional inter-institutional agreement
- If linking case-reporting with mortality or other situations linking individual records or when there is a name identification issue, there is a need for additional clearance
- In Republic of Moldova, data from national registries (case registration & probable mode of transmission) has been de-personalized by the National AIDS center (the institution authorized by law to handle HIV status related personal data) before being made available for analysis.

Data access

- To overcome the issues of ownership of data with institutions considering data as their own and less willing to grant access, a stakeholders' meeting where people agree to grant permission that their data be accessed or shared early on with the designated national institution in charge of compiling the data throughout the process is a useful way to have access to data
- Data ownership by each institution, however, should be respected: first, each institution or owner of the data should be encouraged to analyse their data based on what is needed (guidance to be provided), and share those data. But the sharing of raw data becomes crucial, where analytical capacity is limited
- Republic of Moldova has found useful to institute an intersectoral Thematic Working Group (TWG) for MoT and Data Triangulation, and to work jointly with different institutions and sectors that are gatekeepers of data – that addressed data ownership as well as uneven capacities issues.

Additional considerations:

- Data access: there are some situations when designated institutions do not allow access, even though there are no reasons why it should not and is resolved on a case by case basis
- Many data belong to Associations and NGOs who are functioning apart from the Governments and reaching agreement during the stakeholders meeting may help overcome the barrier to access these data. The same is true with institutions where data can be difficult to have access to (e.g. prisons which fall under another Ministry than the Ministry of Health).

**2) Analysis and expertise needed**

- National expertise exists in all countries to analyse trends from programmatic data, once the question is formulated and to carry out the primary analysis
- When more complex questions need to be answered, starting to triangulate different sources of data and interpreting different sets of data, then outsiders' eyes can be

- most useful to add a new perspective (- “*Is this true? – But why?*”), given that in-country expertise is often limited to looking at its own data sets
- Given there are no standard answers to the same questions, and different ways to go about it, additional expertise or cross-cutting expertise is needed to answer the “why” and understand what the different data sources are telling
  - What is the ideal profile of people to be involved in triangulation? – Difficult to find in one single person: Ideally it is a mix of competencies: epidemiologists with a good knowledge of prevention science and effectiveness of interventions and who can interpret data, but also programme managers with up-to-date on effectiveness knowledge. Need to know which hypotheses to generate (including where to invest)
  - Upcoming analysis and needs: to try to understand better the effectiveness of implemented interventions. Which interventions have had an impact, and which did not? How will low ARV coverage in eastern Europe impact the epidemic, in comparison to other regions? Were they implemented at the scale large enough to achieve the impact? What are the biases in programmatic and surveillance data that might create difficulties in interpreting the interventions’ impact?

Additional considerations:

- It is useful to distinguish for analysis the specific expertise needed for programmatic data and for surveillance data
- A difficulty encountered (Ukraine) with the country expertise is that experts in a particular field tend to analyse only their own data and are not used to compare data received from various sources.

### **3) Use of findings and policies**

- Triangulation exercises are to be more sustainable and effective if those fit into the national programme cycle, in particular as part of evaluation/ programme reviews (upcoming opportunity with GFATM programme reviews), and every 3-5 years to scrutinize the data and use those for evaluation purposes. Frequency will depend on the country, but should not wait 3-5 years to correct known issues. Need to move to the model used in the Asia region (5 countries) where triangulation is part of national programme reviews (e.g. Republic of Moldova has included Data Triangulation in its M&E Plan as a regular programme review modality, to be carried out by an intersectoral group of national stakeholders) where external facilitator teams spend 2-5 weeks in-country with country nationals before the reviews per se take place
- How do we make sure it all feeds into policies?: Involve policy-makers at the early stages with Government stakeholders, health, justice, working group, commissions, and into decision-making process. Policy-makers need to be involved early on and involve them into the process
- Triangulation should inform national strategy and policy with this new scientific evidence and triangulation findings. Identify early on policy-making process and commitment and identify entry points for policy-decision
- The data analysed and improved understanding of data quality (e.g. need for more valid and complete data) and trends will feed into the HIV estimation process. New surveillance tools may help in the near future, e.g.: some EC countries will implement incidence-based HIV surveillance which in turn will help understanding where current HIV transmission is occurring

- Each agency and organization that collects data should continue as part of regular responsibilities to review the quality of its data (e.g. completeness of surveillance rounds with BSS among vulnerable populations for ex. among MSM) and improve data collection process yearly rather than waiting for next 3-5 year cycle. This helps prepare the triangulation analysis. It should be a standard part of any plans, and overcome the perceived issues of additional resource requirements.

Additional considerations:

- Ukraine: communicating with national stakeholders and especially the government, it is sometimes important to have an outside advice on what needs to be done in terms of changing policies and programmes to build up the most evidence-based response, since most internal actors are perceived as biased
- Republic of Moldova: the stakeholder meeting discussed results in breakout groups on how to use results of triangulation in order to design strategies for HIV prevention for the upcoming 2 years NAP Operational Plan. As evidence-informed strategic planning processes have been internalized as part of the national response, Republic of Moldova found it important to fully involve national stakeholders at all stages of the Data Triangulation process, particularly in designing strategies for intervention based on the findings
- Estonia: at the beginning, no stakeholders' meeting but getting all involved on an individual/ institution basis. At the end of the process, the Ministry of Social Affairs and Ministry of Justice will discuss the results for translation into action, with a governmental commission to help implementing these into the national action plan
- Georgia: the same group who was involved in the analysis and programme implementation have prepared the issues and presented the findings to the decision-makers. A team of 5 experts carried out the triangulation which served to inform strategic planning. Now the country needs a Mode of Transmission (MoT) study, and step by step they are coming to addressing difficult questions and that is when it is best to apply triangulation.

#### 4) Capacity-building

- A resource guide specific to the Region with relevant case studies (e.g. from Estonia, Ukraine, and Republic of Moldova) would be most useful to have as a resource and learning tool and to disseminate the approach to be used for concentrated epidemics (could be combined with the mid-East/ North Africa Region, Asia/ with Pakistan) region as well (funding to be sought under the leadership of WHO Collaborating Centre for Capacity Development in HIV Surveillance, School of Medicine, Zagreb, Croatia)
- Investments of resources in building country capacity to analyse data are needed. In-country process should be built upon using own in-country data, bringing people (with their own lens) together to have a broader 'triangulation view' (to become the data interpreters), and using external international facilitators with an in-country teaching institution (to build sustainability). This is a model used in Swaziland and Malawi at country level: expert data interpreters from outside, then with modules for college for two days
- Using in-country and in-house expertise (e.g. United Nations as technical assistance provider through UNAIDS Secretariat and UNAIDS RST, or WHO headquarters)

- European Center for Disease Prevention and Control (ECDC) – expert coming to countries, Zagreb WHO Collaborating Centre, UNAIDS Secretariat/ RST, or others: can be the external driving forces for such processes
- Organize as well regional consultations to build capacity and develop specific recommendations but beware of the cost–effectiveness of this approach vs. direct in-country efforts proven to be effective because of wide variations between countries and direct access to data and specific country situations.

#### 5) Financial Resources and Opportunities

- To demystify the high cost because triangulation on the long term should be part of on-going work
- Small (start-up) funding is necessary to facilitate the process on an ad-hoc basis, e.g. getting the process going, external support, etc.
- Use existing opportunities such as GFATM programme reviews to support such an approach, or others such as an upcoming national programme evaluation.

### 4. Overall Conclusions and Lessons Learned

The key conclusions can be summarized as follows:

- Triangulation is seen as a **valuable and feasible approach** to understand some of the important questions countries wish to answer related to various facets of outcome and impact of programmes
- There is no one size fit all approach but several ways to go about answering the same question depending of the country data, and state-of-the art of the programmes
- Consensus that there is in general **no need of additional ethics clearance** because triangulation is largely based on secondary data analysis or using existing data
- Early on the national country authorities need to bring on board all stakeholders to participate in the analysis of their data, and if not at least to **share their raw data**, as well as to bring in the **programme managers and policy-makers** who will at the end be the final users
- All countries have the capacity to carry out the basic **trend analysis** needed to look at data retrospectively. In order to do **more advanced analysis and triangulate data sources and come to conclusions**, additional expertise is felt useful until further experienced is gained
- Depending of the complexity of questions to answer, the overall process may take a few weeks to several months. Two approaches therefore may be foreseen:
  - 1) capacity-building comprehensive triangulation (e.g. within a national programme cycle for a national evaluation/ review): over a 3-months to 1-year period address several key questions, spread the work at the pace of the national

programmes backed-up on an ad-hoc basis by additional outside technical capacity if necessary, build capacity through workshops, produce the deliverable as a full report. This is the approach that the 3 countries have used in these case studies.

2) fast track focused triangulation (e.g. GFATM performance review): within 2-4 weeks period address and focus on 1 or 2 key questions, block 2-4 weeks of expertise in-country and if necessary backed-up by out-of-country expertise to carry out the analysis and immediate brief report and conclusions. This is the approach countries may wish to follow in the near future.

- Triangulation on the long term should be part of **on-going work with built-in cost** to analyse better the data as part of health systems strengthening and to strengthen national programmes and planning. Additional small funding may be necessary to facilitate the process on an ad-hoc basis, e.g. getting the process going as start-up funds, external support, etc.
- A **resource guide specific to concentrated epidemics** with relevant case studies is needed as a resource and learning tool for the countries affected.

# ANNEX 1

## PROGRAMME

(Facilitator, Cyril Pervilhac)

14.30-15.00 Registration and coffee

15.00-15.30 Principles and methods used in HIV data triangulation (Ivana Bozicevic)

15.30-16.00 Case study 1: Ukraine (Olga Varetska)

16.00-16.30 Case study 2: Republic of Moldova (Stela Bivol)

16.30-17.00 Case study 3: Estonia (Kristi Rüütel)

17.00-17.15 Coffee break

17.15-17.45 Summary: what have we learnt from HIV data triangulation in eastern Europe?  
(Cyril Pervilhac)

17.45-18.30 Brainstorming discussion

Questions to be discussed are: How to improve data triangulation in-country, addressing current obstacles in terms of:

- 1) Ethics and data access
- 2) Analysis and expertise needed
- 3) Use of findings and policies
- 4) Capacity-building
- 5) Financial Resources and Opportunities

Key findings/ summary: what is the best way forward for HIV data triangulation in eastern Europe? (Cyril Pervilhac)

## ANNEX 2

### LIST OF PARTICIPANTS

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