

2nd Consultation Meeting on the Global Platform on Air Quality and Health

WHO Geneva, 18-20 August 2015

Conclusions and recommendations¹

Monitoring

Assuring availability of data from air quality monitoring to the Global Platform faces two types of challenges. The first one is of political or organizational nature and results from poor communication between environmental and health authorities, difficulties in data exchange and sharing, as well as from uncertain source of long-term funding for monitoring programs. The others are technical challenges, related to the decisions on the instruments to be used for monitoring, as well to the lack of widely agreed standard operating procedures assuring adequate quality and reliability of data produced by the monitoring.

In addressing *political challenges*, the meeting participants identified the following approaches facilitating solutions to these challenges:

- Problems with initial funding and resources can be reduced by twinning programs, where partners bring experience and (often) material assistance. UNEP, WMO or WB projects provide also an important opportunity for development of AQ monitoring.
- Engagement of leaders in a country may be driven by building partnerships between stakeholders (public, academia, ministries);
- Sustainability of the process can be facilitated by building local capacities through training, workshops etc. Service contracts with equipment suppliers involving training and follow up are good instruments increasing chances for sustainability of monitoring. Synergies of air quality and climate/weather monitoring should be explored to increase their long-term sustainability and facilitate implementation of QA/QC procedures.
- Governmental commitment to work with WHO (and v.v.) on development of the Global Platform has already been strengthened by the WHA Resolution and the plan to establish SDIs related to air quality. Efficient information exchange between WHO and the governments, encouraging collaboration of various ministries on health issues, is an important driver of the process. Open data exchange policy of UN should facilitate this process.
- Slow progress in implementation of the recommendations concerning monitoring from the 1st consultation could be compensated by establishing a dedicated Task Group on AQ Monitoring. It should further analyze the impediments and drivers required to trigger the improvement of surface monitoring of air pollution.

Technical challenges of the work supporting the Platform establishment would be markedly reduced if the recommendations of the 1st Consultation would be implemented (see Annex 1). Furthermore, the following issues should be considered:

- Explore ways of accessing existing data, still not included in the WHO data base.

¹ Extract from the Meeting Report – Draft 4 Oct. 2015

- Use and disseminate experiences of on-going national and international programs developing AQ monitoring.
- Include source-specific monitoring in the network design. It will be helpful in implementation of source-specific policies. Further development of low-cost monitoring devices may facilitate this task.
- Considering the need for AQ monitoring in rural areas, one approach to its development would be to link it to health surveillance conducted in large rural populations. The existing WMO Global Atmosphere Watch (GAW) observations should be also fully utilized.
- Assure that the low cost instruments are regularly calibrated, preventing the bias resulting from their “drift”.
- Include metadata describing local conditions of monitors in the data management system of the monitoring network.
- The above issues should be considered by the Task Group on AQ Monitoring, with the assignment to formulate simplified, yet user friendly guidelines. Using, *i.a.* the results of the work of the Task Group on Data Integration, the guidelines would address:
 - costs and availability (how many, where to set up) of monitoring sites;
 - alignment with objectives of the remote sensing and modelling;
 - practical and cost effective data management;
 - QA/QC, calibration with reliable instruments.

Household air pollution

Full integration of household air pollution (HAP) in the Global Platform is its ultimate goal but it faces several challenges concerning sources of information on exposure to HAP, health risk assessment, monitoring of implementation of relevant policies, and communication. Conclusions and recommendations from the discussion are presented below, together with identification of related opportunities and barriers/challenges.

Sources of information on *HAP levels and exposure*:

- Questionnaires and tools for household surveys on energy use must be harmonized and validated. Surveys harmonization processes are already underway but advice and comments from the experts involved in the Global Platform development at relevant stages of survey instrument design, validation and revision are welcome. The following topics will be considered: different types of solid fuel (wood, coal, etc.) and others (LPG, electricity), secondary fuel use, new technologies, stacking, heating and lighting. Securing resources for conducting through validation as part of the survey development will remain a challenge.
- Studies (mainly research driven) measuring HAP and exposure should use standard methods (SOPs/guidance/protocols) and include a minimum set of questions on technical conditions and socio-economic status of the household. A minimal level of ambient air monitoring in studied communities (urban or rural) will be needed to have a better understanding of the interrelationship of indoor and outdoor air pollution. Partnership with groups implementing and evaluating stove/fuel roll-out in countries provide good opportunity for implementation of this task.
- Sensors and other low cost monitoring devices give a chance for improved assessment of exposure to HAP. Minimum requirements for such devices and their operation are needed.
- Gather information on the implementation of large improved stove and clean fuel programs. This can be through the Global Alliance for Clean Cookstoves and Fuels,

Global LPG Partnership, etc. Information can be based on IWA tiers² (and subsequently new ISO standards when adopted), and other relevant monitoring information. The Platform should propose minimum set of questions that may be included in monitoring activities for such programs.

- Information collection will require the development of capacity to carry out exposure assessment studies in countries with a paucity of data. Support to such capacity building programs is needed.

The tasks concerning *health risk assessment of HAP* should include:

- Work with the health sector to raise awareness of HAP health effects. One of the approaches (useful also for strengthening the information on health impacts of HAP) would be to include monitoring of health impacts of HAP in large health surveys or by adding exposure information to clinical assessments and records. Such tasks could be included in the integrated management for child illness and Global Action Plan for the Prevention and Control of Pneumonia and Diarrhoea (GAPD).
- Present specific products concerning health risks of HAP on the Global Platform, including protocols for aDALYs and HAPIT tools. They should include materials explaining and interpreting burden of disease estimation methods for both technical and policy audiences.
- Work with IIASA and other partners to assess the potential contribution of GAINS (and other systems) to monitor and forecast impact of policies on HAP.
- Work on development of exposure indicators integrating information on population exposures to household air pollution and pollution from other sources, and facilitating optimization of air quality strategies from public health perspective. Special Task Group working on this issue and testing it with data from India should be established.

In *communicating* on HAP:

- Acknowledge the importance of social and gender determinants as a cross-cutting theme (policy, data collection, reporting, communication, development of SDIs).
- Include information (or links to other sources) on health and safety, including CO poisoning (e.g. from kerosene heaters), burns and scalds.

Pollutants emissions, remote sensing and modelling

Progress in universal availability and quality of data is one of the key conditions for global coverage of the data to be compiled by the Platform. On the other hand, the expert network supporting establishment of the Platform may facilitate this progress. The following issues have been identified as important aspects to the Global Platform process:

- HTAP framework (mosaic of national/regional inputs) offers a framework to build/facilitate ongoing emissions work. 10 km resolution supports global and regional analysis. New mechanism is needed to:
 - enable systematic updates – adding national/regional emissions;
 - stimulate emission changes in regions currently lacking inventories.

² IWA refers to the ‘International Workshop Agreement’ set up under the auspices of ISO, to agree voluntary standards for cookstoves. Tiers of performance were set for 4 items, indoor emissions total emissions, fuel efficiency and safety. The first of these was used as the primary indicator of health risk, and the best-performance tier (Tier 4) proposed emission rates equivalent to the IT-1 for PM_{2.5} (24-hr) and the AQG for CO (24-hr), through a box model simulation. This work is currently being developed through a new ISO standards process (Technical Committee TC 285), see:

http://www.iso.org/iso/iso_technical_committee?commid=4857971. In future, once standards, testing and certification are established in countries, stoves and other clean cooking interventions would have certification which could be assessed through household surveys.

- Such global emission data can support a variety of health related studies. Many such applications need higher resolution data on emissions. Downscaling can be done using data on roadways, land use/land cover, population, etc. Finding these datasets in a “one-stop” shop is difficult; UN agencies and programs could, potentially, facilitate it. It is recommended to develop a program facilitating access to relevant high resolution data.
- Satellite observations can be used for updating information on emissions, for better representing their spatial (and temporal) distributions, and for transparency.
- New remote sensing platforms are in the pipeline. GEMS, TEMPO, and SENTINEL are expected to be on geostationary orbits in the next seven years. They will perform continuous monitoring and generate data with high temporal resolution.
- Workshops to build community to anticipate new data streams and explore data access issues are important and should be utilized. There are opportunities to explore how to use these new data streams before the data is actually available using proxy data.
- Data access issues must be addressed. Very large data sets are spread over many agencies and nations. Data must be in a format that permits their easy use and apply interfaces that make sense to the user community. Community must be comfortable and knowledgeable in working with remote sensing data sets.
- Compilation of toolkits/visualizations of data for health community is needed.
- Further validation efforts, using ground measurements, are needed to improve the application of satellite observations. Examples include data poor environments and regions with specific aerosol types, such as Africa, or mega-cities. More ground sites would be ideal, but there might be also a role for mobile monitors, low cost mobile instruments (Pandora; SPARTAN) and “citizen science”. An opportunity creates also partnering with programs using air quality sensors on aircrafts. Estimation of surface PM_{2.5} concentrations from routine weather observations (in particular visibility and relative humidity) could be considered as well.^{3,4} Such approach is independent of chemical transport models, and hence can be used to cross-validate surface PM_{2.5} concentrations derived with the help of such models.
- HTAP simulations, e.g. multi-model simulations for 2008 & 2010, offer opportunity to support various health applications. Collaboration in projects supporting the Global Platform could influence the scope of such analysis, making it even more health relevant. A platform/tool-kit to facilitate easy use of modelling results for health applications is needed.
- Observation-based, model-based (including receptor oriented sensitivity analysis techniques), and hybrid methods (combining model results with satellite observations and ground monitoring data) providing information on source contributions to exposure should be also further developed.
- There is a need to institutionalize these efforts. This process should bring together communities from health sector and environmental protection agencies, facilitate access to their data sets and determine the needs for further data (e.g. emission data with high spatial resolution).

³ Li, Y., Lin, C., Lau, A.K.H., Liao, C., Zhang, Y., Zeng, W., Li, C., Fung, J.C.H., Tse, T.K.T., 2015. Assessing Long-Term Trend of Particulate Matter Pollution in the Pearl River Delta Region Using Satellite Remote Sensing. *Environmental Science & Technology* 49, 11670–11678

⁴ Lin, C., Li, Y., Yuan, Z.B., Lau, A.K.H., LI, C., Fung, J.C.H., 2015. Using satellite remote sensing data to estimate the high-resolution distribution of ground-level PM_{2.5}. *Remote Sensing of Environment* 156, 117–128

Data integration

Application of the methods developed by the Task Group on Data Integration allows for the following tasks to be implemented in near-term:

- Provide annual country-specific averages of PM_{2.5}.
- Support the development of an air pollution SDG indicator that is simple, transparent, and stable. Suggested approaches include:
 - National annual average population-weighted PM_{2.5};
 - A histogram of concentrations by population (by country);
 - A map of estimated concentrations showing the spatial distribution of exposures (by country);
 - Open description of the methods.
- Solicit inputs from individual countries for providing customised data products. This would also encourage countries to provide additional, high quality, input data.

In the longer-term, the Task Group could:

- Develop interactive visualisation tools and databases. They would enable comparison of grid-specific estimates with monitoring data and other factors, such as population and land use;
- Provide spatially-resolved maps to evaluate urban-vs-rural exposure and, with suitable overlays where available, among vulnerable populations;
- Develop methods to assess source contributions;
- Support decision-making for optimal monitoring placement and network design.

The tasks aiming at improving accuracy and understanding of the estimates are:

- Obtaining newly available monitoring data;
- Continue to utilise the best-available satellite products and numerical model simulations;
- Incorporate land use variables to improve prediction and to address preferential monitor placement;
- Include information, both in terms of input factors and model development, to better capture secondary organic aerosol;
- Evaluate the appropriate spatial resolution needed to perform within-city exposure assessment and how to achieve this with additional data sources.
- Develop strategies to identify regions and countries that would benefit from additional data sources;
- Anticipate the need to analyse data from multiple years and multiple sources;
- Work towards assessing the uncertainty attributable to different sources, both in terms of input factors and model development.

General

All products available through the Global Platform should support and facilitate the work on air quality of health sector (ministries of health, public health agencies and services) and of their interaction with other sectors. To this aim, the Platform should include appropriate tools for communication and provide capacity building.

Concerning *communication*, the following actions were recommended:

- Information provided by the Global Platform should target health sector but be also useful to national and international agencies (such as the World Bank, WMO, CCAC) and their audiences not necessarily specialized in health aspects of air quality but involved in programs which may affect it (in negative or positive way).

- Efficient, transparent, user-friendly and attractive web-based communication infrastructure must be an integral part of the Platform. WHO should invest in its design and maintenance.
- Data, tools and methods available on (or linked to) the Platform's web site should enable, or facilitate, health impact assessment of policies and actions, promotion of health-based strategies and reaction to certain policies or actions. They should enable assessments on various geographical scales (also sub-national and local) and be specific in relation to selected pollution sources.
- The Platform should provide links to examples of air quality (also HAP) intervention studies and to their systematic evaluations, periodically updated by WHO or other agencies. Impact of special sources or events on air quality (such as power generators, desert dust storms, volcanic eruptions, big forest fires, natural and man-made disasters, wars) should be also documented.

Capacity building on national and international levels is essential for efficient use of the Platform's information for policy support. The following approaches were recommended:

- Capacity building should be coordinated by WHO Country Offices and involve WHO Collaborating Centres. Opportunities created by WMO, UNEP or WB programs or local initiatives to create WHO Training Centres in the countries should be also explored.
- The training should aim at breaking specialization silos and facilitating cross-discipline collaboration and integration of health issues in various policies related to air quality. Various aspects of such training would be useful also for programs addressing climate change, so the effort should be made to engage climate change community in it.

As indicated in the discussion, besides of the already active Task Group on Data Integration, implementation of several activities may require creation of Task Groups on:

- Monitoring
- Integrated Exposure Indicator
- Harmonization and Validation of Household Surveys
- Pollution emission inventories
- Global Platform Steering Group

It is recommended that WHO, in collaboration with WMO and UNEP, would assign those groups and would invite their contributors on the basis of specific terms of reference.

Annex 1. Recommendations of the WHO Consultation “Developing a Global Platform on Air Quality and Health”, Geneva 30-31 January 2014

The meeting discussion addressed improving data coverage and quality, making data policy relevant and building capacity for global assessments. Recommendations concerning specific technical areas as well as the way forward are presented in the following sections.

Surface monitoring of air quality

The following approaches are recommended to strengthen surface monitoring of air pollution contributing to the Global Platform:

- A. To establish a minimum common protocol for air quality monitoring by countries, with reference to existing good practice examples and basic Standard Operating Procedures (SOPs) for:
 - Definition of monitoring objectives, one of which should be provision of data for health risk assessment, and data quality objectives with uncertainty estimate;
 - Pollutants to be monitored (e.g. PM_{2.5}, black carbon, NO₂, ozone); however, PM_{2.5} should have the highest priority, followed by ozone;
 - PM_{2.5} speciation monitoring in support of atmospheric transport models and satellite remote sensing development and data validation;
 - Minimum time resolution of monitoring;
 - Spatial monitoring issues (density, urban/rural monitoring, pollution hotspots, urban micro-scale monitoring, etc.);
 - Choice of, positioning, maintenance, and calibration of monitoring equipment;
 - The QA/QC system to be used;
 - Appropriate staff training necessary for monitoring implementation;
 - Integration of PM_{2.5} monitoring data into the WHO data base.
- B. In establishing new monitoring, adopt a stepwise approach prioritizing:
 - Longer term population-oriented monitoring in fixed locations to reflect trends in pollution and support source characterization;
 - Maximal use of existing data from models and remote sensing in designing monitoring networks;
 - Improved spatial coverage (also by low-cost equipment) over sophistication of measurements – while still giving attention to continuous improvement of data quality;
 - Exposure indicators useful for burden of disease calculations;
 - Expansion of monitoring network in developing countries and emerging economies with sub-Saharan Africa as top priority, using, if necessary, affordable monitoring devices of proven quality.

Atmospheric transport models

The contribution of atmospheric transport models to population exposure estimates can be improved by implementation of the following recommendations:

- Improve spatial and temporal resolution for PM_{2.5} and ozone estimates, e.g. by better description of urban areas and its emissions;
- Consider the use of regional emission inventories (e.g. MOSAIC inventory) in global models, and the use of emission inventory by source sector. This would facilitate assessment of the regional and sector-specific contributions and better information for policy makers;
- Consider the development of “ensemble” of models to improve the simulated concentration data, including exploration of the use of the regional/local modelling that is being conducted by the countries;
- Explore the use of top-down constraints by satellite and in-situ observations for assessment of pollution trends, spatial and temporal variation and emission ratios such as NO₂/reactive hydrocarbons ratios;
- Advance understanding and description of parameterization of the sub-grid physical processes occurring in the atmosphere and their impact on the concentration estimates, e.g. secondary organic particles formation;
- Explore feasibility of global models for other health and climate related air pollutants and of models describing pollution in cities (or megacities)

- Conduct retrospective analysis and source apportionment (integrating the air quality modelling and monitoring data) in order to provide information on main sources and sectors contributing to human exposure.

Satellite remote sensing

To strengthen satellite-derived PM_{2.5} estimates used by the Global Platform, the following steps are recommended:

- Proceed towards higher spatial resolution of estimates (e.g. using satellites MODIS with 1-3 km resolution, MISR with 4 km, and eventually VIIRS with 750m resolution);
- Use more accurate and precise retrievals (e.g. through MODIS Collection 6);
- More fully incorporate active measurements (e.g. through CALIOP space-borne lidar);
- Use measurements with higher temporal resolution to estimate annual mean more accurately (e.g. from geostationary satellites);
- Endorse and foster the collocation of AOD and surface PM_{2.5} measurements (e.g. through SPARTAN project and other networks);
- Develop related information on NO₂ and other pollution species (e.g. using the TROPOMI instrument onboard the Sentinel-5 precursor satellite with 7km resolution after expected launch in 2015);
- Build on expertise from space agencies to increase data continuity;
- Consider modifications of the estimating procedures to account for urban increment;
- Consider using ground-based and airborne measurements which offer valuable resources to calibrate and validate satellite data;
- Consider exploring information on road networks to inform proximity to road.
- Make formal statements to space agencies to encourage relevant measurements;
- Nurture groups and communities that will inform the exposure dataset.

Data integration

The work in this area necessary for the Global Platform should include:

- further documentation on the available statistical techniques;
- an examination of the practicalities of their implementation to the assessment of population exposure to air pollution based on various approaches;
- possible feasibility analyses based on existing datasets.

A Way Forward

Providing truly global estimates of exposure to outdoor air pollution requires the integration of information provided by different approaches. Each of the three approaches to the assessment of air quality discussed at the Consultation: surface monitoring, atmospheric modelling and satellite remote sensing must provide information to the Global Platform on Air Quality and Health, each contributing its strengths and advantages. Combination of the approaches merges those strengths leading to more robust and reliable exposure assessment with a global coverage, and a capacity for assessment of sector-specific contributions to the exposure and policy scenario analysis. Gradual improvement of each of the data sources, recommended in the methods-specific section and profiting from the developments in each of the methodologies, will further strengthen the integrated approach. This will allow regular enhancement and expansion of the consecutive updates of the data base in the Global Platform.

Approaches to data presentation

The following recommendations aim at assuring transparency and reliability of the exposure estimates presented by the Global Platform, as well as their usability to various groups and communities. A hierarchical approach, with increasing complexity, would facilitate the data use. The Platform, managed by WHO, should enable open, read-only access to the data and information. The access should be facilitated by shared and automatic data management platforms.

A. The basic data set, aiming primarily at the decision makers would include:

- Separate databases should be developed for all three data streams –surface monitoring, atmospheric transport models and satellite remote sensing – with methods for integration of the three streams to be explored as a separate endeavour;

- Minimal output of each of the air pollution data sets (surface monitoring, modelling, remote sensing, separately) should use a common format that is easily understandable, (e.g. country/urban annual means or population-based distribution of concentrations). For each of the data sets, a consistent error metric should be included.
- Integrated national exposure indicators (e.g. annual mean PM_{2.5} concentration for a country, possibly with additional estimates for urban and rural areas) based on a combination of the results from all three data streams combined with spatially explicit population data from international, verified source (such as the Gridded Population of the World⁵ used by GBD2010 project). Integration of the data will be based on methods of statistical fusion and, in the future, assimilation.

B. Additional information, aimed primarily for national and international experts using the Platform for research and comparative assessment of risks from air pollution to health would include:

- High-resolution estimates of pollution concentration that can, if necessary, be aggregated up to national-level or urban/rural scale;
- Pointers or links to external databases that contain higher time resolution data (seasonal or daily) from countries with capacity to provide such data;
- Links to higher spatial resolution air quality data, particularly for urban areas; An option for a real-time update of the Platform's data linked to the local data sources should be explored;
- PM_{2.5} speciation and other air pollutants data (in particular – information relevant to climate community, such as black carbon and other short lived species);
- Minimum information on physical data (metadata) that goes along with surface measurements (or links to such information);
- Links to other exposure databases, e.g. for household fuel consumption and indoor air pollution;
- Links to databases that facilitate attribution of exposure to key pollution sources;
- GIS-ready graphs (maps) with gridded estimates of pollution on a regional and country level, accessible through widely used GIS software packages;
- Data base with gridded estimates with information allowing their use in mapping programs.

Role of WHO

The Global platform will be instrumental for WHO to support strengthening of countries' capacity to address air pollution related health risks, at global, regional and country levels. WHO headquarters will focus on the development of the knowledge base, monitoring and evaluation. The WHO regional offices will use the Platform to strengthen their direct support to the Member States, and in particular to their health and environment sectors, in design of their engagement with other sectors in addressing health aspects of air pollution.

Development of the Global Platform can be achieved only through active collaboration of the experts from the relevant disciplines, supported by their professional networks, national institutions and international organizations, including space agencies. However, there is a special role of WHO to play in order to harness relevant data and use it to support the development of policies and to build capacity in the Member States necessary to address air pollution as an important determinant of health. The Consultation recommended that WHO:

- Provides leadership and coordination for activities leading to the establishment and maintenance of the Global Platform, defining the framework for all activities. Specific objectives could be pursued by Task Groups involving relevant external experts and facilitated by WHO;
- Provides institutional framework for all activities of the global platform;
- Provides information technology (IT) infrastructure support for the Global Platform, potentially using advice and technical support from the external experts and institutions;
- Continues technical guidance through updating of WHO Air Quality Guidelines and actively communicating its findings in the Member States;
- Uses the data from the Global Platform to widely communicate about the status of air quality and its health impacts in the world, particularly in developing countries;
- Organizes communication and training activities to strengthens the capacity of countries to contribute to, interpret and use the data gathered by the Platform;
- Articulates the key messages that establish the link between air quality and health in global policy platforms around the world, e.g. through post-2015 Sustainable Development process or Clean Air and Climate Coalition;

⁵ Gridded Population of the World (GPW) <http://sedac.ciesin.columbia.edu/data/collection/gpw-v3>

- Engages developing countries and emerging economies including in Sub Saharan Africa, in a discussion about air quality and health, exploring existing barriers (financial, policy, awareness, and capacity) for air quality monitoring and encouraging development / improvement of their pollution emission inventories;
- Supports capacity building, particularly in countries with high estimated exposure to air pollution but little or no air quality monitoring or assessment of related impacts on health today;
- Actively looks for support among Member States, international organizations and space agencies for the groups and communities that will inform the exposure dataset and for activities (surface monitoring, modelling, satellite remote sensing) contributing to the exposure data, including promotion of these activities through such frameworks as Annual United Nations Inter-Agency Meeting on Outer Space Activities;
- Enhances networking with relevant organizations and groups, such as Group on Earth Observation (GEO) and its Secretariat and the Committee on Earth Observation Satellites (CEOS), Institute for Health Metrics and Evaluation (IHME), Health Effects Institute, and the Task Force on Hemispheric Transport of Air Pollution of the LRTAP Convention to coordinate the work on the exposure dataset and lend confidence in the assessment results to policy makers;
- Facilitates Member States' access to the existing air quality and health assessment expertise so as to strengthen policy-making and to encourage national initiatives, such as new measurement networks, new emission inventories, better regional resolution of databases and air quality modelling that supports policy and decision making;
- Use the information gathered by the Global Platform for periodic assessments of the burden of disease due to air pollutants, and for developing scenario analysis that can support policy making (including regional and sector-specific assessments).

Follow up actions

Participants of the Consultation recommended the following activities on exposure assessment necessary as an essential input to the Global Platform on Air Quality and Health:

1. Preparing the estimates of national mean concentration of PM_{2.5} demonstrating the proposed approach to be completed by the end of 2014. The estimates will be based on the most recent update of air quality data collected by WHO and others (e.g. for the GBD2013), the updated ensemble atmospheric transport model outputs, including source sector contributions, developed for TF HTAP and updated estimates from satellite remote sensing. WHO should appoint a small Data Integration Task Group managing this development and involving experts currently working on each of the approaches as well as on the methods of data fusion.
2. Besides the Data Integration Task Group, WHO will establish three thematic Task Groups following up the topic-specific recommendations and facilitating the link with the national experts. Each of the groups in cooperation with WHO should identify its "core" team and be open for external contributions. WHO will propose the organizational structure and way of working of the Task Groups.
3. WHO will organize web-based communication channels facilitating on-line discussion of each group, exchange of information and documents.
4. Regular (roughly every two years) consultative meeting, gathering representatives of the Task Groups and of the Global Platform users should be convened to review the status of the Platform, assess its utility for the burden of disease assessment and policy support and agree on the further steps to increase its use to policy making, especially concerning public health but also environment, climate and other sectors.