ROAD MAP FOR THE NEXT EDITION OF THE STATE OF THE ENVIRONMENT REPORT AND LONGER-TERM DEVELOPMENT OF ENVIRONMENTAL REPORTING IN THE ISLAMIC REPUBLIC OF AFGHANISTAN

2020

UN environment

ZOÏ environment network

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INTRODUCTION

Post-conflict experience related to state of the environment (SoE) reporting in Afghanistan goes back to 2003, when UNEP first published a Post-Conflict Environmental Assessment[1]. Following that, two national SoE reports were produced by Afghanistan's National Environmental Protection Agency (NEPA) in 2009[2] and 2012[3].

Afghanistan's Environment Law (Article 9.12) mandates NEPA to prepare a State of the Environment (SoE) report every two years for urban areas and every five years for rural areas. Despite the obvious challenges for preparing these specific reports, this also raises the need to build a sustainable long-term 'production pipeline' for SoE reporting in Afghanistan.

During the workshop "Reporting on the state of the environment in Afghanistan", co-organised by UNEP and NEPA in Kabul in March 2019[4], NEPA expressed its commitment to developing sustainable SoE reporting capacities, building on the production of the next 2020 SoE report for Afghanistan. Based on the results of the workshop, NEPA asserted an interest not simply in producing one more SoE report but creating the foundations of a reporting system that will exist and evolve and improve over time. From this perspective, SoE reporting comprises a key element of governance infrastructure, justified by the constant and in many cases increasing role of the environment and natural resources in the development of any given country.

This action plan assumes that SoE reporting will also be supported by future governments at least at the same level, as is indeed stipulated in the law. A long-term perspective provides opportunities for learning and continuous improvement over time, which is necessary not only because environmental challenges continue to evolve, but also because of new technologies and methods, and new demands by politicians and society to cover issues that have not been covered in previous SoE reports.

The next SoE assessment report and the SoE reporting system that Afghanistan envisions building should ideally be based on modern approaches for assessing the state of the environment; both in terms of its institutional setup, assessment design, content, impacts and the report-making process. While traditional SoE reporting simply answered the question 'what is the state of the environment', more advanced approaches covered in the March 2019 SoE capacity-building workshop go into deeper and more analytical questions, including:

- what are the driving forces of environmental change;
- what are the impacts on a wide range of societal actors;
- how the society is responding to the challenges; and
- how do these responses work; and what do we see if we are projecting environmental challenges and their impacts into the future.

It will be equally important that true environmental priorities are covered that are top-of-the-mind issues for both Afghanistan's government and its broader society. This would, inter alia, mean aligning them with the strategic perspectives of the Sustainable Development Goals as they are being taken up by the country[5]; Afghanistan National Peace and Development Framework 2017 to 2021[6]; the

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[1] http://wedocs.unep.org/handle/20.500.11822/7656
[2] https://zoinet.org/product/afghanistans-environment/
[3] [State of the Environment Report. National Environment Protection Agency. Kabul, 2012. In Dari]
[4] https://www.unenvironment.org/resources/report/reporting-state-environment-afghanistan
[5] https://sustainabledevelopment.un.org/content/documents/16277Afghanistan.pdf
[6] http://extwprlegs1.fao.org/docs/pdf/afg148215.pdf

National Priority Programs and the priorities of global environmental governance and the respective financial mechanisms such as the Global Environment Facility and the Green Climate Fund.

This action plan builds on outputs of the March 2019 SoE workshop where participants were invited and provided an opportunity to discuss the rationale, approaches and various stages of the plan, with their advantages and disadvantages in mind. Results of follow-up discussions with NEPA are also considered.

State of Environment reporting is shown as a circular process in Figure 1; consistent with the view that the process would be repeated with regular frequency to address new changes as they appear on the national, scientific research and policy scenes – and their implications for society. The methodological elements of the action plan also build on UNEP's generic training modules [7], customized to the Afghanistan context.

Figure 1. General scheme of the SoE reporting process

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[7] https://www.unenvironment.org/integrated-environmental-assessment
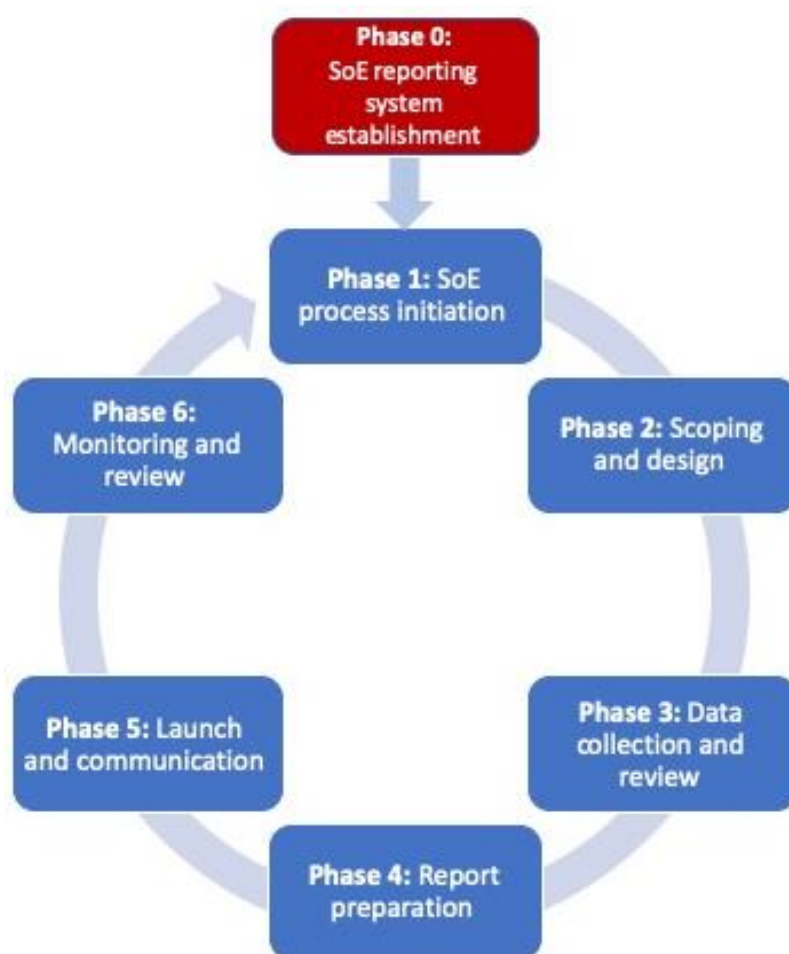
PHASE 0: ESTABLISHMENT OF THE SOE REPORTING SYSTEM

A key part of Phase 0 is securing a clear political mandate for SoE reporting. Usually the mandate can take different forms such as a ministerial decree or a law, which needs to be straightforward and strong enough to avoid later questioning the legitimacy of the exercise. The mandate serves as a basis for engaging different levels of government, international organizations, and non-governmental actors, including scientific experts. It also serves as a foundation for establishing a clear institutional home for the process in NEPA and procuring the necessary resources for a secretariat to coordinate and oversee the process. In the case of Afghanistan, this step may be considered already achieved with the adoption of the legal requirements under Afghanistan's Environment Law on SoE reporting and NEPA's decision to establish a sustainable SoE reporting system over the long term.

Further review is nonetheless required to determine whether the existing legal requirement may need to be strengthened and updated. Additional subsidiary legal or administrative instruments such as by-laws, cabinet decisions or NEPA executive orders may be required to set the process in motion and secure sufficient administrative authority and resources to carry through the high-level mandate and engage with other stakeholders. Among other critical actions, funds need to be secured to run the process.

At this point, it is also important to build initial awareness of, and basic capacities for, environmental assessment and reporting among the relatively broad range of potential stakeholders of the SoE process. In this respect, the capacity building workshop in March 2019 can be considered an important step which has already been taken.

Photo 1: Participants of the SoE reporting workshop in Kabul, 4–6 March 2019

Source: Stocktaking Afghanistan's environment to inform effective policy-making gets underway. UNEP, 2019

Phase 0 Activities

- Secure legal and political mandate
- Strengthen administrative authority and acquire financial resources for SoE report production
- Organize initial capacity building and training

Phase 0 Outputs

- Mandate for SoE reporting legally defined
- The mandate is reinforced through other relevant instruments as needed
- Financial resources are made available
- Initial capacity-building takes place, training materials and outputs are available to SoE stakeholders

PHASE 1: SOE PROCESS INITIATION

Institutional arrangements for environmental assessment and reporting are influenced by the following factors:

- a legal mandate that may include specific provisions for organising the work;
- access different skills and expertise not always available within the 'core' team;
- access to data held by other organisations, as well as to peer review and quality control the contents of the assessment;
- need to organise a participatory process to better account for different viewpoints and perspectives of e.g. governmental and economic sectors, national and provincial, urban and rural, civil society, private sector, etc;
- better understanding of the expectations of the user community.

International experience to date suggests various possible models for creating long-term SoE production capacities, with their respective pros and cons, either internally within the responsible governmental agency or commissioning a separate entity to undertake the task (Table 1).

Table 1. Common institutional models for state-of-the-environment reporting

Type of Agency	Possible Advantages	Possible Disadvantages
Existing government department	- Limits proliferation of special agencies - Existing regional networks - Greater collaboration within government - Access to data and information	- Not recognized as independent - Limited public and other stakeholder involvement - Tends to protect the *status quo*
Independent or semi-independent agency	- Autonomous - High profile and visibility - Protentional for innovation and greater efficiencies - Links to non-governmental stakeholders and scientists	- Requires formal powers of access to data - Lack of regional networks - Potentially insecure funding - No authority associated with reporting

Source: Pintér L. et al. Capacity Building for Integrated Environmental Assessment and Reporting. Training Manual. 2nd edition. IISD, UNEP, Ecologistics International, Ltd. 2000

In the case of Afghanistan, NEPA signalled that its preferred model is to build capacities within the organisation, while at the same time strengthening and benefitting from partnerships and a pool of competent external experts. This NEPA proposition forms the basis of this road-map document for producing the next 2020 edition of Afghanistan SoE report.
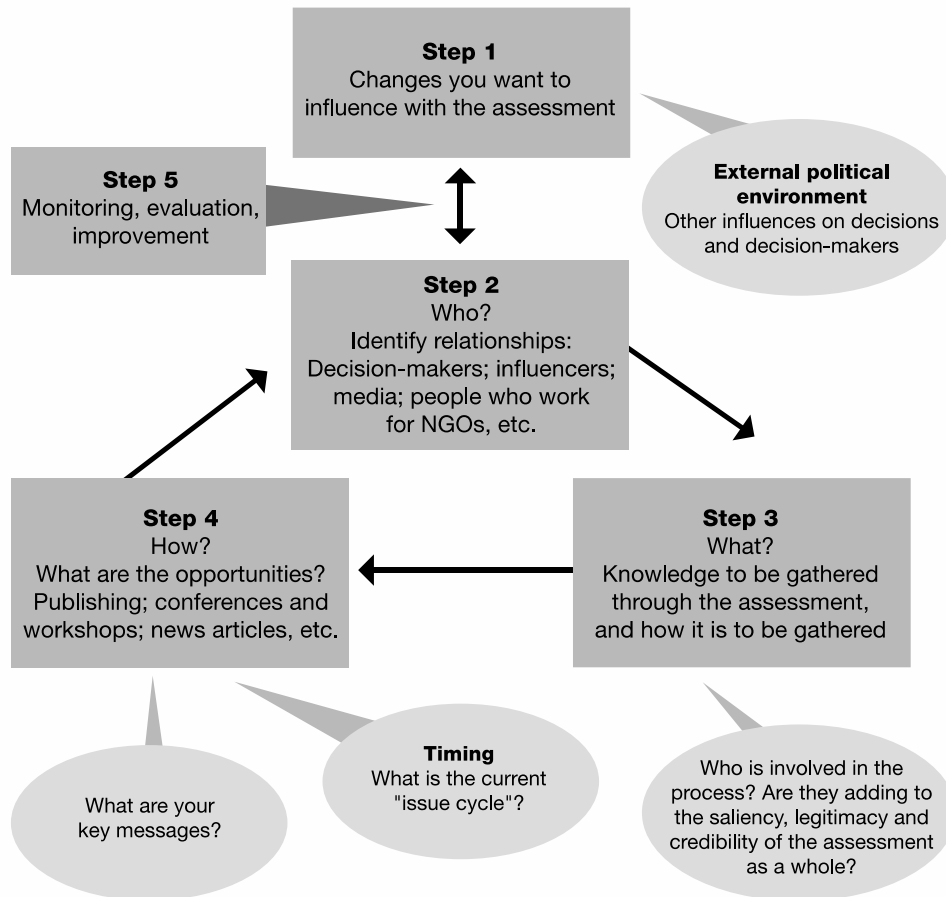
Phase 1 involves establishing the operational foundations for SoE reporting. This includes creating a small, e.g. 2−3 person strong, SoE secretariat at NEPA; directly reporting to the leadership of the organization. The secretariat would play a central role including in designing the overall process, data management and coordination, initiating specific stages of report development, and operationally engage and coordinate the activities of key actors. It would also ensure the process is on time, on budget and deliverables are produced as expected. Another key element of the secretariat's work will be ensuring technical and scientific quality control. This will involve overseeing the selection of qualified contributors based on defined criteria and setting up a review mechanism of draft outputs.

The secretariat will take the lead in overseeing the role of all contributors, organised around the expected tasks in the reporting process. Contributors could be key collaborating institutions at the national, provincial or sectoral levels. Roles and conditions could be defined through bilateral agreements (contracts, memoranda of understanding) with specific terms of reference.

The staff designated to run the secretariat should have experience in organizing all aspects of inter-organisational and expert cooperation, including regular production and review meetings. Specific mechanisms for ensuring proper consultation, participation and work sharing should also be put in place, such as rolling agenda of meetings, reviews, web-sites, list-servers and shared work areas.

Phase 1 would further involve the drafting of an impact strategy, incorporating outreach through the media and other communication channels, that would be followed throughout the process. The experience with other SoE and environmental assessment processes is that communication should not be an afterthought. It has to be defined at an early stage of the process and consistently implemented as activities are carried out and partial outputs of communication value produced. Thus, already at the onset, NEPA needs to define the target audience of the SoE report and the impacts they expect to achieve with it – e.g., awareness, policy shifts, institutional synergies, reversing unfavourable trends, etc. This will help define the reporting formats, elements of the report contents and analytical focus, and the hands-on approaches to reach the maximum number of users in the most efficient ways.

Figure 2. Design of impact and communication strategy

Step 1
Changes you want to influence with the assessment

External political environment
Other influences on decisions and decision-makers

Step 5
Monitoring, evaluation, improvement

Step 2
Who?
Identify relationships:
Decision-makers; influencers;
media; people who work
for NGOs, etc.

Step 4
How?
What are the opportunities?
Publishing; conferences and
workshops; news articles, etc.

Step 3
What?
Knowledge to be gathered
through the assessment,
and how it is to be gathered

What are your
key messages?

Timing
What is the current
"issue cycle"?

Who is involved in the
process? Are they adding to
the saliency, legitimacy and
credibility of the assessment
as a whole?

Source: Creech H. et al. IEA Training Manual. Training Module 3: Developing an impact strategy. UNEP, IISD

Understanding the expected impact and the target audiences will help define the broader range of stakeholders in the SoE report beyond the production team immediately involved in the report's preparation – and the ways to engage them. Here it is also important not to exaggerate the extent of consultations; a too heavy participatory process may turn out detrimental for completing the assessment at all. At the same time, this argument should not be used as an excuse for the process to be monopolised by a small group of closely associated organisations, or individuals.

Table 2. Preliminary list of stakeholders for Afghanistan's next SoE report

PUBLIC AUTHORITIES	NGOs, PUBLIC GROUPS, MEDIA
National Statistics and Information Authority	Afghanistan Environment Experts Association
Kabul Municipality	Afghanistan Young Greens
Afghanistan Meteorological Department	Aga Khan Foundation
Ministry of Agriculture, Irrigation and Livestock	Climate Action Network South Asia
Ministry of Education	Environment Watch Afghanistan
Ministry of Energy and Water	Famine Early Warning Systems Network
Ministry of Finance	Green Way Society
Ministry of Hajj and Religious Affairs	iMAPP
Ministry of Industry and Commerce	National Council of Religious Scholars
Ministry of Information and Culture	Reform and Change Network
Ministry of Mines and Petroleum	Wildlife Conservation Society
Ministry of Public Health	Local community committees
Ministry of Rural Rehabilitation and Development	Mainstream media
Ministry of Transport and Civil Aviation	
Ministry of Urban Development and Housing	**BUSINESS**
Ministry of Women's' Affairs	Da Afghanistan Breshna Sherkat
National Disaster Management Authority	Urban Water Supply and Sewerage Corporation
National Environmental Protection Agency	
	INTERNATIONAL AGENCIES AND DONORS
RESEARCH AND UNIVERSITIES	UN (UNDP, UNEP, FAO, UN-Habitat, WFP)
Kabul University	Bilateral agencies (GIZ, JICA etc.)
Kabul Polytechnic University	Development banks

Source: Reporting on the State of the Environment in Afghanistan. Workshop Report, 4–6 March 2019. UNEP

The secretariat will ideally have a designated staff person in charge of outreach, communication and media relations. This role can, however, also be outsourced, either internally to the public relations / media communication unit of NEPA or externally to a partner NGO or a professional public relations / communications company. In the latter case, continuous interaction between the 'core' staff of the secretariat and the (semi-)external communication staff will need to be maintained.

As a large part of the communication will take place electronically, the secretariat would further need to have on board, or have direct access to, a web designer and experts in the use of social media (the latter can be part of the communication tasks above). Similarly, some other technical roles related to publication, graphic design, map and satellite imagery preparation, language editing may be outsourced; either in-house to NEPA's publications unit if required capacity exists, or alternatively to the government's publications office or an external service provider if policies allow.

The secretariat should be allocated a budget to cover the process, data, analysis, production and outreach related expenses of the report preparation. The budget should also include resources to enable the participation of experts whose costs would otherwise not be covered by their employer (e.g. from non-government organisations or academia). Ideally, the required resources would become a structural component of NEPA's standard operating budget to ensure the continuity of SoE reporting as part of the government's 'knowledge infrastructure'.

Phase 1 Activities

- Design the overall process with activities, deliverables, roles and time lines
- Staff the secretariat and define roles of its members

- Identify key partners and stakeholders, define and negotiate their roles
- Establish coordination and quality control mechanisms, including on data management
- Develop an impact and outreach strategy
- Prepare the budget, allocate funds and other resources

Phase 1 Outputs

- Agreements/memoranda and terms of reference for the secretariat and contributors
- Work plan and budget
- List of invited contributors and other stakeholders
- Impact and outreach/media/communication strategy

PHASE 2: SCOPING AND DESIGN

In Phase 2, the basic parameters for the report need to be set: the geographic boundaries of the reporting area, including subnational (provincial, ecosystem-based or city-level)[8] entities covered; the time scale covered, both in terms of past years and the time horizon of forward-looking analysis.

This phase also involves defining the broad analytical assessment framework for the SoE report that clearly points out what elements of the environment will be covered and how these elements are linked to the socio-economic domain and human well-being. While alternatives exist, the standard and widely used approach for SoE reporting is the Driving forces – Pressures – State – Impact – Response (DPSIR) framework that can accommodate essentially all key dimensions of environmental sustainability concerns, their impacts and responses.

Figure 3. Visual presentation of the DPSIR framework
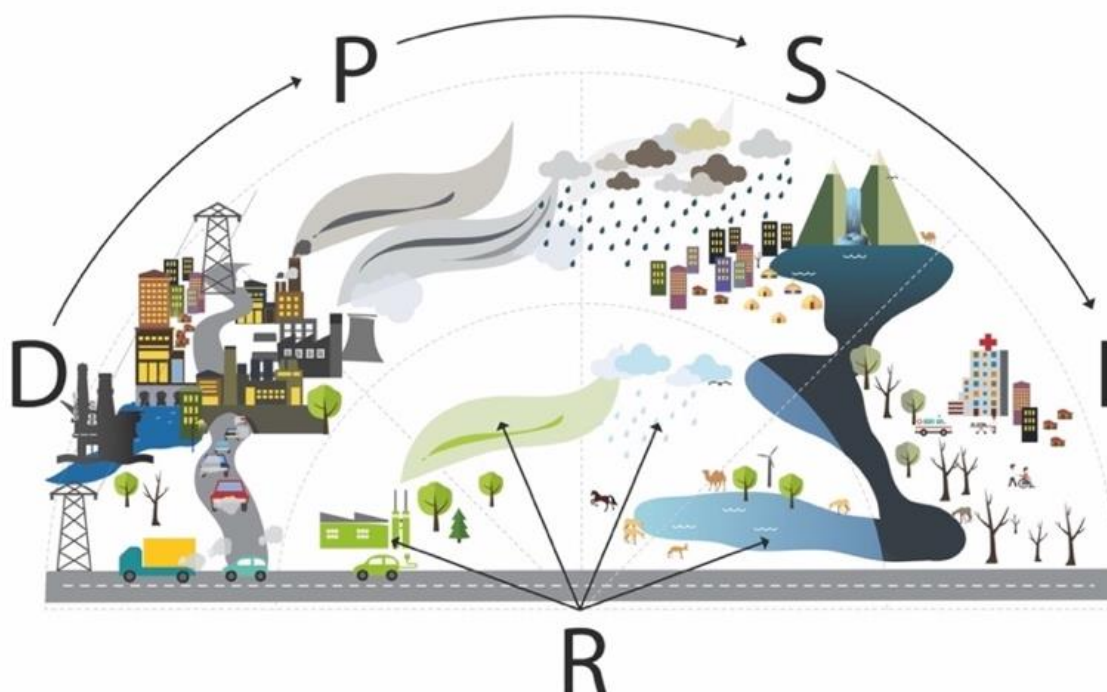
Source: [Interactive State-of-the-Environment Report of the Republic of Kazakhstan 2016 newecodoklad.ecogosfond.kz]

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[8] As discussed above, SoE reporting mandate in Afghanistan defines specific reporting requirements for urban and rural areas.

In practice this means that for each of the environmental issues and media covered in the report, the analysis should clearly connect:
- the historical and the current state of the issue (water, air, biodiversity etc.) with their causes (pressures and the forces driving them);
- impacts on other environmental and non-environmental issues; and
- policy, technology and other tools the society has or should have at its disposal to reduce negative environmental impacts in a sustainable way (including how effective these tools have been so far).

Table 3. Example table of contents for the state of the environment Afghanistan 2020

Foreword (co-signed by Afghanistan / NEPA leadership)
Afghanistan environment 2020: key messages for policy makers
Acknowledgements

1. Introduction (purpose, process, participation, data sources)

2. What is happening to Afghanistan environment? Issues and media
- Air quality in cities
- Water
- Forests, rangelands, wetlands and biodiversity
- Land and soils
- Waste and chemicals
- Emergencies and disasters
- Climate change and other global issues

3. What are the reasons? Environmental pressures and what drives them
- Population and demographics
- Economy and trade
- Agriculture
- Industry, energy and mining
- Transport
- Conflict

4. Where are solutions – and are they effective?
- Laws, plans and strategies
- Financing and economic solutions
- Access to information, public awareness and participation
- Education and capacity building
- Examples of solutions: alternative energy, EIA, protected areas, engaging people…

5. What is coming?
- Outlook under business as usual
- Can some of the trends be reversed and what would it take?

6. Conclusions: so what, and where to go from here?

Literature references
Data sources
List of participating organisations and experts
Annexes (selected data sets, additional information etc.)

Once the analytic framework is agreed, the next task is identifying the themes covered by the SoE report. This should begin with a review and identification of environmental priorities covered in Afghanistan's previous two SoE reports to determine whether the topics are still relevant, or should be reformulated around more recent concerns, and whether any new emerging issues need to be added. For this purpose, it would be important to prepare an outline of the full report, with a chapter structure like the one above that is in sync with the categories of the analytical framework. It is important to underline here that the starting point for analysing the themes and issues selected should be the environmental state and answering the question 'what is happening to the environment?' The outline should also accommodate the priority topics to be covered. Even if the outline changes during the course of the reporting process as new inputs are provided, it can help guide the contributors from early on and serve as an overarching structure for inputs.

While the majority of the topics covered in the previous editions of Afghanistan's SoE reports remain valid, it is suggested that also new topics reflecting new issues and emerging trends find their way into the 2020 edition. The SoE capacity building workshop in March 2019 included an exercise with participants that resulted in an initial set of priorities that could be further reviewed. The proposed table of contents (Table 3) for the next edition of the Afghanistan SoE report can be used as a zero draft for further discussion and refining before starting the production process.

For forward-looking analysis, UNEP's Global Environment Outlook (GEO) methodology can be used to develop national or sectoral outlooks and to discuss what needs to be changed to slow down and reverse unfavourable trends under business-as-usual scenarios. This work can partially build on scenarios and outlooks from Afghanistan's reports to the UN Framework Convention on Climate Change[9] and the UN Convention on Biological Diversity[10].

To manage and harmonize the report writing process, a style guide should be prepared. As many individual experts with different writing skills and styles will contribute to the report, it will be important to ensure their contribution follows common, agreed upon standards. The style guide would include practical guidance on overall writing style that fits the needs and capacities of the intended audience[11], the use and representation of data and references, the numbering and expected length of sections and so on. As other SoE processes have already developed style guides, it should be possible to adopt one, with modifications if necessary, to suit the specific needs of Afghanistan rather than developing a style guide anew.

The above tasks would be led by the SoE reporting secretariat, but they would also require the input of a wider range of partners and stakeholders. The secretariat should therefore consider organising a broad consultation workshop involving all report stakeholders and partners expected to contribute to the report. In addition to reviewing the overall mandate of the report, the workshop should discuss its overall purpose, analytical framework and involve participants in the finalisation of priority issues covered. Participants should also be involved in reviewing and revising the annotated outline of the report and identifying their specific contributions and deadlines.

Phase 2 Activities

- Review and select the analytical framework and geographic boundaries of the report
- Define the preliminary priority issues and the contents of the report
- Develop the report's annotated outline for discussion
- Prepare and discuss the style guide

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[9] https://unfccc.int/sites/default/files/resource/SNC%20Report_Final_20180801%20.pdf
[10] https://www.cbd.int/doc/world/af/af-nr-05-en.pdf
[11] For instance, decision-makers and the general public are likely to be put off by a highly science-oriented writing style.

- Organise a multi-stakeholder workshop to review the framework, priorities, set-up and planning of the report

Phase 2 Outputs

- Methodological guidance document
- Provisional table of contents and annotated outline of the report
- List of agreed upon priority issues, revised contents and outline
- Style guide

PHASE 3: DATA COLLECTION AND REVIEW

As extensively discussed in the March 2019 workshop, data are the lifeblood for SoE reporting. In order to be useful, data relevant for the identified priority issues have to be available both in adequate quantity and quality. Producing data that meet such requirements assumes stable institutions, the availability of measurement equipment and protocols, qualified staff and adequate data management capacities. Data also have to be available with adequate thematic, temporal and spatial coverage.

Given the ongoing conflict in Afghanistan, meeting these criteria is expected to be possible only in certain cases. Nevertheless, using the right approach, even under such conditions it should be possible to build the evidence base for SoE reporting that could gradually improve over time.

SoE reporting is not a data but an issue driven exercise, where data serve the purpose of the assessment. In order to define the content of the database, data and indicators related to the key issues in the SoE report should be identified. SoE reporting will require data on a wide range of topics, and also different types of data – including qualitative data – that typically come from different sources and in different formats. In order to keep track of data, either the establishment of a dedicated SoE database should be considered, or the adoption of an existing suitable database, if one is available[12].

A key step is for NEPA to secure early in the SoE process the cooperation of key data providers, such as the National Statistics and Information Authority for standard statistical data and iMAPP for geospatial data capacity. The SoE database would be a central element of the SoE infrastructure and should be an online platform that can handle both geospatial and statistical information. A basic option would be to utilize low-cost (or free), secure, cloud-based storage systems to create a single access point for data files (e.g. Drobox, Google Drive).

The selected data and indicators will need clear definitions and metadata. One good and relevant source for indicator definitions, metadata and methods is the indicator system developed for the Sustainable Development Goals[13] (SDGs) by UN Statistical Division (UNSTAT) and a global network of statistical organizations. A good source of definitions and methodologies for environmental indicators is UNECE's list[14] developed within the Environment for Europe process, in which, for instance, the Central Asian neighbours of Afghanistan are engaged.

In order to ensure comparability and, not least, the cost-effectiveness of data collection, and to be useful for Afghanistan's international reporting obligations under various conventions, indicators expected or already used for such reporting should be considered. Afghanistan is a party to sixteen

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[12] Cf. UNEP's MapX system https://www.mapx.org/ and its application in Afghanistan
[13] https://unstats.un.org/sdgs/indicators/database/
[14] https://www.unece.org/env/indicators.html

global multilateral environmental agreements, many of which such as the UN Framework Convention on Climate Change and the Convention on Biological Diversity require data intensive reporting. Re-using the latest reported data for environmental conventions in an SoE report offers cost-efficient access to usually high-quality information vital for SoE analysis. National monitoring of SDGs should also be able to contribute relevant data.

Table 4: Afghanistan's participation in multilateral environmental agreements

Convention	Signature Date	Date of Ratification
Convention on International Trade Endangered Species of Wild Fauna and Flora (CITES)	30 Oct 1985	28 Jan 1986
United Nations Framework Convention on Climate Change (UNFCCC)	12 June 1992	19 Sep 2002
United Nations Convention on Biological Diversity (UNCBD)	12 June 1992	19 Sep 2002
United Nations Conventions to Combat Desertification (UNCCD)	12 Nov 1994	19 Sep 2002
Vienna Convention for the Protection of the Ozone Layer (Vienna)	22 March 1985	17 June 2004
Montreal Protocol on Substance that Deplete the Ozone Layer (Montreal)	1985	17 June 2004
Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto Protocol)	1998	3 Sep 2012
Stockholm Convention on Persistent Organic Pollutants (Stockholm)	1972	7 Jan 2013
Rotterdam Convention (Rotterdam)	2011	7 Jan 2013
Cartagena Protocol (Cartagena)	2000	7 Jan 2013
On Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel)	2005	23 Jan 2013
Convention on the Conservation of Migratory Species (CMS)	1983	2013
Nagoya Protocol (Nagoya)	1992	1995
South Asian Association for Regional Cooperation (SAARC)		2012
Minamata Convention of Mercury (Minamata)	2013	2017
Paris Agreement (Paris Agreement)	2016	2017

Source: NEPA. Afghanistan reporting to international conventions. Presentation at the workshop 'Reporting on the State of the Environment in Afghanistan', Kabul, 4–6 March 2019

Despite will intentioned efforts, the lack of quality data will remain among the key challenges for SoE reporting in Afghanistan in the foreseeable future. Thus, parts of the SoE 2020 report narrative will inevitably remain anecdotal, making it even more important to use all available expertise, and data sources which focus on specific issues and cases[15], research, organised targeted surveys to fill data gaps. Simultaneously, it will be important to oversee that minimum data quality criteria are met including properly referencing experts and other inputs. Sources may also include observations made by citizens (the emerging field of environmental assessment known as 'citizen science'), and data related to the traditional ecological knowledge of local and tribal people living on the land and having experiential information that can be obtained only through an extended observation of environmental

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[15] Cf. NEPA's portal for statistical and geospatial data on biodiversity, protected areas and pollution developed with WCS; UNEP-organised monitoring of PM_{10} in Kabul air https://www.unenvironment.org/news-and-stories/story/gasping-air-kabul; and ICIMOD-facilitated discussions of developing a national Water Information System http://www.icimod.org/?q=35240.

processes on the land. Capturing such observational and qualitative data should also be recognized as valuable and systematically recorded for use in the report writing process.

At the same time, it will be important to initiate the building of long-term capacities for environmental data collection and management, with SoE 2020 as the first step towards this longer-term goal. This will require long-term investment to ensure monitoring protocols, equipment and human capacity to operate and maintain data management systems that are in place. For this purpose, a dedicated focal point on data management should be appointed (e.g. SoE secretariat or commission separate entity) to coordinate the overall data management process and maintain data standards.

Phase 3 Activities

- Appoint a dedicated focal point on data management and develop data guidelines
- Select and clearly define relevant indicators and data sets, including metadata
- Develop (or adopt) a suitable database /data management approach
- Identify, and negotiate with, key data providers and repositories

Phase 3 Outputs

- Suite of relevant indicators defined and documented
- Operational database / data management solutions established
- Agreements with relevant data providers

PHASE 4: REPORT PREPARATION

Phase 4 is the central part of the action plan where the core content of the report is produced and 'packaged'. Report preparation, data collection and analysis are not entirely separate, as new data needs and opportunities to acquire and make use of previously unknown data will likely arise during the writing process. A strong coordinating role of the secretariat in this phase is critical, as contributors to the different sections of the report would likely be working in parallel but would need to make cross-references to other sections that are still evolving. It is the role of the secretariat to review all advanced drafts as they are being produced, highlight any possible inconsistencies and identify to authors opportunities for cross-referencing. The Secretariat would also serve as a collection point for completed text and be responsible for compiling the full draft of the report.

The main task in this phase involves **research and analysis**, where the selected experts produce text related to the chapters of the report assigned to them. The writing has to follow the logic of the conceptual framework and be supported both by available data and evidence from reliable sources and reliable publications. The writing has to take into account the rules set out in the previously prepared style guide, which should produce a report that is more coherent both in terms of content and format. As much as possible text in the report should be original, with copy-pasting from existing sources minimized and, when it is necessary, clearly referenced to avoid plagiarism.

In order to reach the intended target audience in the most effective way, the report should include relevant **high-quality visuals**, charts and maps to present data and indicators, as well as photos and other illustrations to help make the desired cases and trigger a motivated response. When visual materials are sourced from previous publications, permissions to reuse them should be acquired. Considering that preparing original charts and maps in particular may need specialized technical skills, analysts should have access to secretariat staff or external experts with the necessary technical expertise to assist in their preparation.

Review is an essential quality control, and as much as possible time and capacity for systematic peer review of all parts of the report should be organized. It is assumed that NEPA will arrange an internal review by default. However, external peer review by experts at partner institutions would likely further increase the report's quality, as long as time and capacity for systematic follow-up on the received comments is also planned. A review meeting of the completed draft with a broader range of stakeholders and / or representatives of the target audience of the report will help ultimately test and fine-tune the report's messages, content and presentation.

Editing is a routine part of the SoE process to ensure consistency of style and presentation and to adapt text inputs from different authors to the needs of the report's target audience. Ideally the report would be edited by one professional editor who besides his or her professional qualifications as an editor is also familiar with environmental science, policy and practice. The editor works closely with contributors and is responsible for creating text that is polished in every detail and ready for signoff by NEPA leadership and publishing.

Once editing is done, the report needs to be **laid out** by a graphic designer. To make this work efficient and cost-effective, design criteria should already be included in the style guide. The graphic designer may need to reproduce some of the charts and maps in higher quality and require original datasets from analysts.

Once the report is laid out, a **distribution** plan for the printed report should be developed to ensure effective dissemination including at the provincial level. This will also help determine the required number of report copies to be printed.

The report should ideally be **published** in both hard copy and electronic formats. The most basic method is to make the printed report available as a pdf document on NEPA's website. However, NEPA may also decide to make the report available in a more interactive format as an e-book or in html with embedded links, and provide direct access to data from charts, and embedded videos. Publishing in a more advanced electronic form has implications for the way the book is written, as it would assume reading on screen and on multiple types of devices. If a more interactive option is chosen, investing in a web developer and designer would be essential.

Phase 4 Activities

- Organise and supervise the writing of assigned sections of the report
- Organise review of the draft with stakeholders and extended production team
- Revise the draft based on stakeholder consultations
- Ensure consistent language editing of the final version of the report
- Organise graphical design and layout
- Develop a report distribution plan
- Prepare the report in print and electronic/online formats

Phase 4 Outputs

- Draft chapters and first synthesis report
- Peer review comments and review meeting summary
- Revised chapters and the second draft of the report
- Edited chapters
- Charts, figures and maps
- Report Distribution Plan
- Final report in print and electronic formats, including summary report

PHASE 5: LAUNCH AND COMMUNICATION

The SoE report's production is not completed with a book on the table. With the final report in hand, one needs to channel its ideas and goals to the target groups. The report itself will act as raw material into the various outreach channels according to the communication strategy.

Like any other product, the SoE report can be marketed or, in other words, supplied to the target groups to satisfy their demands. Only they can determine if the products have a real value at the end. In general, people are experiencing an information overload and need to be made interested in the new product. Different target groups consume information in different ways. For example, a researcher would like to have access to crude data and make conclusions independently; an administrator or a politician would prefer a brief visual summary of possible scenarios to determine a necessity for action; and journalists would look for a human dimension behind facts and figures. This means that one report can not satisfy informational needs of all target audiences equally well. To do so, it will need to be broken into several tailored products delivered through different communication channels.

Formats and channels for delivering SoE messages

Spoken options include visits, interviews, speeches, meetings, press conferences, training sessions, radio broadcasts, discussion groups, and hearings.

Written options include reports, flyers, newsletters, posters, and brochures.

Visual options include presentations, television, slide shows, films, and videos.

Digital options include Internet, CD, and DVD-ROMs, PC-demos, e-mial bulletins, discussion groups and online conferences.

Source: Rucevska I. et al. IEA Training Manual. Training Module 7: Creating communication outputs from the assessment. UNEP, IISD

Firstly, it may make good sense to start 'leaking out' key messages of the SoE report already during the finalisation of the text. That is, once the key messages are defined and agreed and there is sufficient evidence and analysis to back them. As part of media strategy, carefully carved-out messages may be channelled, for instance, one by one at periods of time, to selected mainstream media/journalists from the NEPA pool and through social media. This will help get the audience interested in the contents and the 'twist' of the forthcoming report as well as to anticipate it.

Based on the final draft, a summary for policymakers should be prepared. The summary would be written for a high-level audience and focus on key findings and direct policy implications, covering specific top-level environmental issues, implications for relevant Afghanistan-SDGs, the Afghanistan National Peace and Development Framework and the National Priority Programs.

Once ready, the report and associated products (summary for policy makers, the underlying database) should be launched. The **launch** may involve a high-profile media event and/or a series of events with the specific provincial or thematic focus, all organized by NEPA and attended by public officials from the highest possible level. To make things easier for NEPA staff, a master presentation can be prepared that covers the main findings and recommendations of the report. A media tool-kit extracting the report findings in a 'journalist-friendly way' will facilitate reporting in the press.

At the same time a range of derived products based on the report's content and findings can be produced to reach the wider circle of readers in different ways, for instance:

- policy briefs for high-level officials;
- media tool-kit extracting the findings in a 'journalist-friendly way';

- sets of messages and images targeting specific social media channels (e.g., Twitter, Facebook, Instagram);
- educational kits to be distributed to schools around Afghanistan;
- brochures, flyers, posters, calendars and similar commonly-used 'social marketing' material.

Considering that Afghanistan is a multi-lingual country, the preparation of language versions of the full SoE report or at least its summary, both in electronic and print form should be considered. If translation will be required, the Secretariat will need to engage the help of professional translators in advance of the launch. If language versions of the report are produced, the launch should be timed so that all language versions are available. Language versions of the derived information products will also extend the reach nationally and internationally (English).

Phase 5 Activities

- Communicate selected key message in parallel with report production
- Prepare summary for policymakers
- Prepare other derived products (brochures, policy briefs, media kits etc.)
- Prepare the language versions of the report and derived products
- Develop agenda and materials for launch events
- Organise launch events
- Plan and organise a campaign in mainstream and social media
- Disseminate report messages through other forms and channels

Phase 5 Outputs

- Report messages customised for various media and channels
- Summary for policymakers
- A set of derived products
- Final report and derived product translated into national languages and English
- Agendas, materials and reports of launch events
- Resulting media coverage

PHASE 6 MONITORING AND REVIEW

Phase 6 of the process takes place on a different timeline and involves monitoring the use and usefulness of the SoE report. Unlike a commercial product whose value is determined by pure profit, the 'market success' of an SoE report needs to be checked against broader and fuzzier criteria, such as the usage and the impact of its information.

Assuming that with the SoE 2020 Afghanistan produces not only one report but establishes the foundations of a systematic and periodic SoE reporting system, it will help make future reporting easier and more effective as lessons from earlier reporting cycles are collected and taken into account when the next cycle is initiated. Monitoring should be the task of the SoE reporting secretariat through a dedicated staff person who keeps track of feedback received and usage of the report's findings, actively solicits additional feedback and user perspectives, requests for additional information and suggestions or opportunities for improving the content and methods in future reporting.

SoE evaluation techniques include:

- sale / usage statistics;
- web usage statistics / counters;
- media coverage;
- feedback from users and partners;
- commissioned reviews, studies and interviews;

But obviously it is much easier to measure outputs on the left side of the 'information chain', whereas tracking the actual usage and impact of the report can be quite difficult.

Figure 4. Measuring the impact across the information chain
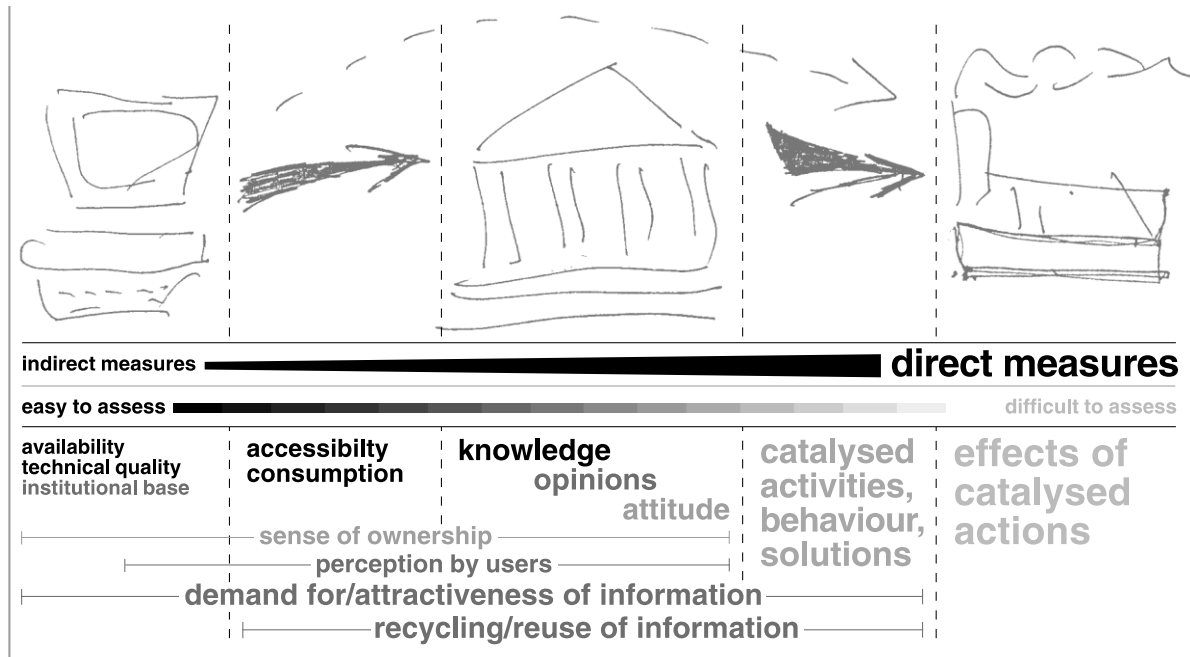
Source: Denisov N. and L. Christoffersen. Impact of Environmental Information on Decision-making Processes and the Environment. UNEP / GRID-Arendal Occasional paper 01 2001.

In this relation, it would be useful to allocate a budget for these evaluation tasks following the completion of the report, and possibly to engage specialised public, private organisations or university students to monitor user's perspectives and impact through focus groups or special studies. Report monitoring and evaluation results can also strengthen the argument for future SoE budgetary allocations.

Phase 6 Activities

- Designate staff responsible for monitoring report use and impact
- Choose use and impact metrics and means to measure them
- Implement use and impact monitoring (some tasks may require outsourcing)
- Assess user feedback and overall impact in time for the next report

Phase 6 Outputs

- Use and impact monitoring data
- Analytical report prior to the start of the next reporting cycle

Table 5.Tentative Production Plan for Afghanistan SoE 2020

ACTIVITIES	Months												
	*	1	2	3	4	5	6	7	8	9	10	11	12+
0. SYSTEM ESTABLISHMENT													
Secure legal and political mandate	█												
Secure administrative power and financial resources		█	█										
Organize initial capacity building	PS												
1. PROCESS INITIATION													
Design the overall process with activities, deliverables, roles and timing		P	█										
Staff the secretariat			█										
Identify key partners and stakeholders, define and negotiate their roles		█	█										
Establish coordination and quality control mechanisms			█										
Develop an impact and outreach strategy			█										
Prepare the budget, allocate funds and other resources			█										
2. SCOPING AND DESIGN													
Review and select the analytical framework and boundaries for the report				P									
Define the preliminary priority issues and the contents of the report				P									
Develop the report's annotated outline for discussion				P									
Prepare and discuss the style guide					P								
Organise a stakeholder workshop to review the approach and set-up					S								
3. DATA COLLECTION AND REVIEW													
Select and clearly define relevant indicators and data sets					P								
Develop (or adopt) a suitable database /data management approach					█								
Identify, and negotiate with, key data providers and repositories					█								
4. REPORT PREPARATION													
Organise and supervise the writing of assigned sections of the report					P			P					
Organise draft review with stakeholders and extended production team								S					
Revise the draft based on stakeholder consultations									█				
Ensure consistent language editing of the final version of the report										█			
Organise graphical design and layout									█	█	█		

ACTIVITIES	*	1	2	3	4	5	6	7	8	9	10	11	12+
Develop a distribution plan											X		
Prepare the report in print and electronic / online formats										X			
Months													
5. LAUNCH AND COMMUNICATION													
Communicate selected key message in parallel with report production									X				
Prepare summary for policymakers									X	X			
Prepare other derived products (brochures, policy briefs, media kits etc.)									X	X			
Prepare the report and derived products in other languages										X	X		S
Develop agenda and materials for launch events											X		
Organise launch events										S		X	
Plan and organise a campaign in mainstream and social media										X	X	X	
Disseminate report messages through other forms and channels											X	X	
6. MONITORING AND REVIEW													
Designate staff responsible for monitoring report use and impact											X		
Choose use and impact metrics and means to measure them											X		
Implement use and impact monitoring												X	
Assess user feedback and overall impact in time for the next report												X	

Note: the actual duration of the process can be adjusted up or down depending on the resources, circumstances and needs.

*	Completed in the preceding/preparatory period
+	Including the post-production period
P	Meetings of the production team
S	Stakeholder meetings

RESOURCE NEEDS AND MOBILISATION

Planning without resources is wishful thinking. In adding tasks to the worklist, one should always be conscious of what this means in terms of people's time and money. Planning the work load of the SoE production team in person-months will help understand whether the available staff can do the job, and how to split 'core' work from tasks that can be delegated to other organisations. This is also linked to having funds available for subcontracting other organisations and consultants, as well as which partners may be willing to contribute in-kind. Additional expenses may be incurred due to meetings, the need to purchase data, infrastructure and technology (e.g. computer hardware, access to the Internet etc.), as well as office space.

Budget calculations have to be as complete and explicit as possible and linked to all steps of the (revised) production plan above. At this point, it is difficult to provide a precise estimate for the Afghanistan SoE report. A 'ballpark' estimate, however, may be close to 3 person-years of NEPA core staff and 6 person-years with SoE production partners over the 12-month production period. This includes post-production monitoring but does not include direct costs of purchasing data, organising events, and printing costs.

Table 6. Estimated human resource needs for SoE Afghanistan 2020

Phase of report production cycle	Core NEPA staff person-months	External partners person-months	Other costs
1. Process initiation	3		No
2. Scoping and design	2	2	Yes
3. Data collection and review	15	5	Yes
4. Report preparation	5	35	Yes
5. Launch and communication	10	25	Yes
6. Monitoring and review	3	5	No
TOTAL ESTIMATE	**38**	**72**	

As the production of the SoE 2020 report in the proposed form is a new exercise for Afghanistan, and institutional experience to date is limited, NEPA may benefit in having the process accompanied by qualified external advisers with hands-on experience in SoE reporting from other countries and/or internationally. In which case, this will also need to be included in the budget.

If available resources are insufficient to do the job, resource mobilisation options include:

- looking for own additional national resources, which is always easier if one can demonstrate to the leadership of the organisation/government why the needs are exactly what is being asked for;
- building on data, analytical and financial synergies with other NEPA lead processes, such as reporting to international conventions (UNFCCC, CBD, BRS);
- encouraging in-kind contribution and cost-sharing by partners, this is helped by networking and common interests, missions and benefits;
- external fund-raising with the development assistance institutions, private sector etc.

A separate opportunity is sponsorship based on anticipated returns such as from advertising. Although this has not been widely used for funding environmental assessment and reporting so far, it has a big and expanding potential.

ANNEX 1: TERMS OF REFERENCE OF THE SOE PRODUCTION SECRETARIAT

LOCATION: National Environment Protection Agency of the Islamic Republic of Afghanistan

REPORTING: to the Deputy Director General of NEPA

COMPOSITION:

- 2–3 persons on NEPA payroll allocated fulltime to SoE reporting tasks
- NEPA staff or consultants on the part-time basis in the areas of IT and data management, graphical design, copy-editing, print and digital publishing, event management, communication and media relations

TASKS OF THE SECRETARIAT:

OVERALL MANAGEMENT

- Planning, organising and managing the SoE reporting process in a timely cost-efficient manner
- Relations with external SoE production partners
- Relations with the broader range of SoE report users / stakeholders

PREPARATION OF REPORT'S CONTENT

- Drafting SoE report outline and synthesising its drafts based on expert inputs
- Organisation (including contract management) and supervision of report writing by external experts
- Organisation of quality control of the report's content
- Definition of data needs, management of core data and meta-data for the report

ORGANISATION OF REPORT'S PUBLISHING

- Editing, graphical production, layout and printing of the SoE report
- Electronic publication of the report
- Preparation of audience-specific derived information products
- Translation of the report and derived products as needed
- Mainstream and social media campaigns

ORGANISATION OF MEETINGS AND EVENTS

- Production meetings with external partners
- Broader user / stakeholder consultations
- Launch events

USAGE AND IMPACT MONITORING

- Putting in place and implementing usage and impact monitoring system
- Reviewing and analysing monitoring results

COMPETENCIES OF THE CORE STAFF

At least 2 years of hands-on experience in 2–3 of below areas, and at least brief familiarity with the rest of the areas.

- Administration and project management
- Environmental issues and their assessment
- Data and statistical analysis
- Cartography and graphical design
- Writing, editing and publishing
- Information technology
- Outreach, media and communication
- Organising public events and inter-agency cooperation

The head of the secretariat should have experience with most of the areas above and have a demonstrated strong record of managing projects on time and within budget, fostering inter-agency relations, and understanding modern means and requirements of public communication.