

The Fifteenth Session of the Intergovernmental Meeting  
on the Acid Deposition Monitoring Network in East Asia  
16 - 17 December 2013, Chonburi, Thailand

## **Development of the Draft Report of the Review on the State of Air Pollution in East Asia**

### **I. INTRODUCTION**

1. This document is prepared to report the status of the Development of the Draft Report of the Review on the State of Air Pollution (RSAP) in East Asia as presented in details in the Attachments.

### **II. ACTIONS REQUIRED**

2. The Fifteenth Session of the Intergovernmental Meeting (IG15) on the EANET is invited to consider current status of the Development of the Draft Report of the RSAP submitted by the Network Center as the secretariat for the Reviewing Committee for the RSAP and may wish to discuss, comment, provide guidance and make recommendations, if any.

**Attachment 1**

**Development of the Draft Report of the Review on the State of Air Pollution  
in East Asia**

**I. INTRODUCTION**

1. “The Instrument for Strengthening the Acid Deposition Monitoring Network in East Asia (EANET)” was adopted at the Twelfth Session of the Intergovernmental Meeting (IG12) on the EANET held in November 2010, and was signed by twelve participating countries of the EANET during and after the IG12. In accordance with the “Decision 1/IG.12” adopted at the IG12, it has been operational since 1<sup>st</sup> January 2012 although one country still has not signed yet.
2. The Instrument stipulated the possibility of expansion of the scope of the EANET in the Item 2 “Objectives and Scope”, which stated that “the scope of this Instrument may be extended, as decided by the Intergovernmental Meeting (IG)”. In line with this provision, the Terms of Reference (TOR) of the Working Group on Future Development of the EANET (WGFD) in 2011-2012 decided by the IG12 includes the “Discussion on the issues of expansion of the scope of the EANET”, and the Medium Term Plan for the EANET (2011-2015) also includes this issue as one of the agenda to be discussed during the five years.
3. “Expansion of the scope of the EANET” was discussed at the Tenth Session of the Working Group on Future Development of the EANET (WGFD10) held in July 2011 in accordance with the TOR of the WGFD, where it was suggested that the scientific evidence be regarded as an important basis to consider the future priorities.
4. This issue was taken also at the Fourth Meeting of the Task Force on Research Coordination (TFRC4) and the Eleventh Session of the Scientific Advisory Committee (SAC11) held in October 2011. As the result of discussions, the SAC11 agreed to refer the review of the state of air pollution in East Asia to the Task Force on Research Coordination (TFRC) according to the TOR of the TFRC.
5. The Thirteenth Session of the Intergovernmental Meeting (IG13) on the EANET held in November-December 2011 in Hanoi, Vietnam took note that the TFRC will review the state of air pollution in East Asia, and recommended the WGFD to discuss the issues on expansion of the scope, including the possible way to make use of the review to be conducted by the TFRC.
6. The Fifth Meeting of the Task Force on Research Coordination (TFRC5) held on 21 November in Yangon, Myanmar agreed that the review of the state of air pollution in East Asia will be implemented by the “Reviewing Committee on the State of Air Pollution in East Asia (RC)” and the chairperson of the TFRC, Dr. Gromov assigned Prof. Wilfred M. Carandang and Prof.

Cho Seog-Yeon as the co-chairpersons of the RC. Based on the discussion at the TFRC5, the chairperson of the TFRC reported names of co-chairperson and the membership candidates of the RC and preliminary contents of the “Review on the State of Air Pollution in East Asia (RSAP)” to the SAC12.

## II. DEVELOPMENT OF THE PRELIMINARY DRAFT REPORT

7. Based on the discussion at the SAC12, the RC consists of several experts on atmospheric environment and ecological impact assessment was established under the TFRC in February 2013 and two meetings were held in February and August 2013. The NC was delegated as the secretariat for the RC.
  - The First meeting of the RC (RC1) was held on 4 February 2013 in Niigata, Japan. The preliminary table of contents, possible lead authors and contributors to draft the first manuscripts, and the” Scope of the Review (ANNEX 1)” were discussed.
  - The Second meeting of the RC (RC2) was held on 2-3 August 2013 in Niigata, Japan. The status of submission of the first draft manuscripts from the lead authors and contributors were confirmed. The meeting confirmed action plans towards submission of the preliminary draft report of the RSAP to the Sixth Meeting of the Task Force on Research Coordination (TFRC6) on 24 September 2013 and the subsequent Thirteenth Session of the Scientific Advisory Committee (SAC13) on the EANET on 25 – 26 September 2013 in Xiamen, China. The minutes of the meeting of the RC2 is attached to this document (ANNEX 2) which includes Modified Contents of the Report of the RSAP (Annex 1), List of Participants (Annex 2) and Status of the First Draft Collection (Annex 3\*). The list of the Authors (ANNEX 3) and Preparation Schedule (ANNEX 4) are attached as well.
    - \* Annex 3 is the updated version according to the status of the first draft collection as of 26 September 2013.
8. The latest preliminary draft report of the RSAP was uploaded by the NC on the following EANET website: <http://www.rsap.eanet.asia/> for sharing it with the TFRC members, the SAC members and all of the lead authors, the authors and contributors.
9. The Preliminary Draft Report of the Review on the State of Air Pollution in East Asia was submitted for review and discussion from scientific and technical viewpoints to the TFRC6 and the SAC13 on 24 and 25 – 27 September 2013 in Xiamen, China, respectively, and for review, comments, suggestions and/or recommendations to the WGFD12 on 14-15 October 2013 in Chonburi, Thailand. Views and comments of the TFRC6, the SAC13 and the WGFD12 are presented in the Attachment 2.

## ANNEX 1

### Scope of the Review on the State of Air Pollution in East Asia

(i) Objectives

This review aims at synthesizing best scientific knowledge on the present state of air pollution in East Asia covering emission inventory, air quality, risk assessment, interaction between climate and air pollution, and mitigation measures. It is expected to be a basis for discussion on future development and expansion of the scope of the EANET.

(ii) Geographical Scope of the Review

The targeted area to be covered by the review should be East Asia ranging the participating countries of the EANET, i.e. Northeast Asia including Asian part of Russia, and Southeast Asia. Other parts of the world may be referred to for comparison whenever necessary. Data for urban and regional scale air pollution should be given higher priority rather than local air pollution.

(iii) Temporal Scope of the Review

Recent state of air pollution since 2000 should be focused, but the data in previous years may also be referred to for trend analysis, or for historical comparison.

(iv) Literatures to be surveyed

Literatures published in peer-reviewed international journals should be referred to in principle. Other types of literature sources may be referred to in some of research areas such as emission inventories and mitigation measures.

(v) Difference in policy of review from Chapter 6 in the Second Periodic Report

The review of Chapter 6 in the Second Periodic Report on the State of Acid Deposition in East Asia (PR SAD2) was made focusing on the research output using the EANET data for analysis or model validation. In the RSAP, papers that are not relevant to the EANET should also be given equal priority to the EANET relevant papers because this review will be one of the basic documents in order to discuss expansion of the scope of the EANET.

**ANNEX 2**

**MINUTES OF THE MEETING OF THE SECOND MEETING OF THE  
REVIEWING COMMITTEE (REVISED)**

**I. Introduction**

1. The Second Meeting of the Reviewing Committee (RC2) on the State of Air Pollution in East Asia (RSAP) was held on 2-3 August 2013, in Niigata, Japan. The Meeting was organized by the Network Center (NC) for the Acid Deposition Monitoring Network in East Asia (EANET).
2. The Reviewing Committee (RC) members from Japan, the Philippines, Republic of Korea, Thailand and the United States of America attended the RC2, though two members from China and Japan couldn't attend due to unavailability of entry visa and conflict of the schedule with other business. The representatives of the Network Center (NC) for the EANET attended the RC2. The List of Participants is attached as annex 2. For reference purpose, the (Modified) Contents of the Report of the RSAP is attached as annex 1.

**II. Opening of the meeting (Agenda Item 1)**

3. The RC2 was opened by Dr. Hajime Akimoto, Director General of the Asia Center for Air Pollution Research (ACAP). He welcomed the RC members and expressed his appreciation to the support, efforts and cooperation of them to the EANET. He introduced that the report of the Review to be developed will be a base of discussion for the future development and scope expansion of the EANET at the Working Group on Future Development of the EANET (WGFD) and Intergovernmental Meeting (IG) on the EANET. He indicated that the preliminary draft report of the RSAP will be submitted to the Thirteenth Session of the Scientific Advisory Committee (SAC13) in September 2013 for comments and recommendations. The final draft report of the RSAP will be adopted by the Session of the Scientific Advisory Committee (SAC) next year. He appreciated that most of authors submitted their first draft much earlier than he expected.
4. The Co-chairpersons and the members of the RC and other participants introduced themselves.

**III. Adoption of the agenda (Agenda Item 2)**

5. From Agenda Item 3, the RC2 was chaired by the Co-chairpersons of the RC, Prof. Wilfredo M. Carandang, Professor and Assistant to the Chancellor, University of the Philippines Los Banos, Philippines and Prof. Seogyeon Cho, Professor, Inha University, Republic of Korea.
6. The Agenda was adopted as proposed (EANET/RC 2/2/1).

**IV. Review on the progress of preparation of the preliminary draft report of the RSAP since the First Meeting of the Reviewing Committee (RC1) (Agenda Item 3)**

7. The NC made presentation on the “Status of First Draft Collection - the Report of the Review on the State of Air Pollution in East Asia (RSAP)” in order to summarize the progress of the first draft development of the RSAP (Annex 2).
8. Major point of the discussion was on how to contact the authors yet to give further response since the first communication and to request them to develop and submit their first drafts.

**V. Consideration on the first draft of each chapter of the preliminary draft report of the RSAP (Agenda Item 4)**

9. Dr. Akimoto, author of Chapter 1, made a presentation to introduce the structure and contents of Chapter 1. Following his presentation, it was clarified that since East Asia in Fig. 1.2 is the area defined by latitude and longitude, most of Southeast Asian area is excluded.
10. Prof. Joshua Fu, University of Tennessee, made a presentation to introduce the structure and contents of Chapter 2. Following his presentation, several technical questions and comments were exchanged.
11. Dr. Hiroshi Tanimoto, National Institute for Environmental Studies, made a presentation to introduce the structure and contents of Chapter 3. Following his presentation, it was suggested that the good recent observation data of Ozone in East Asia should be included and Dr. Tanimoto will review some papers.
12. Prof. Seogyeon Cho, made a presentation to introduce the structure and contents of Chapter 4 followed by Prof. Junko Shindo, University of Yamanashi, Dr. Hiroyuki Sase, ACAP, and Prof. Wilfredo M. Carandang. It was discussed how to treat papers discussing forest decline by soil acidification and papers discussing tree damage by ozone.
13. Dr. Takuya Shiozaki, Japan Environmental Sanitation Center (JESC), made a presentation to introduce the structure and contents of Chapter 5. Based on the discussion following the presentation, structure of sections in Chapter 5 was modified (Annex 3). Other points of discussion were:
  - Mercury should be targeted in the Section of heavy metals
  - Papers on air toxics authored by Prof. Hayakawa’s team, Kanazawa University should be reviewed.

14. Dr. Savitri GARIVAIT, King Mongkut's University of Technology Thonburi (KMUTT), and Dr. Junichi KUROKAWA, ACAP made a presentation to introduce the structure and contents of Chapter 6. After their presentations, the points of discussion were:
  - It was confirmed that East Asia in Section 6.3 includes Southeast Asia and Northeast Asia.
  - It was confirmed that biomass burning (Haze) should be considered as one of natural emission and should be included in Section 6.2.
  - The papers on forest burning in Siberia should be reviewed.
  - Organic Acid emitted by biomass burning should be reviewed.
  - New section for Natural Dust Sources will be created.
  
15. Prof. Shuxiao Wang, Tsinghua University, China, the lead Author for Chapter 7, is not the member of the RC, and she did not participate in the meeting. The RC members were requested to review the first draft submitted by her.
  
16. Dr. Akimoto and Prof. Katsunori Suzuki, Kanazawa University, made a presentation to introduce the structure and contents of Chapter 8. Before his presentation, Prof. Suzuki suggested that the nature of his section is little different from the natures of other chapters because co-benefit approach is a recent initiative and there is no paper for review. After their presentations, the following points were agreed;
  - Counter measures against Short Lived Climate Pollutants (SLCPs) should be covered in this chapter.
  - Chapter 7 “Mitigation Measures” will target conventional air pollutants.
  
17. Overall discussions on the preliminary draft report of the RSAP were:
  - i. The necessity to get copyrights owners’ permission was discussed regarding reference documents, pictures, figures and tables in the report.
  - ii. Author for 5.2.3 and 5.3.3 on Heavy Metals (Mercury) will be nominated by Dr. Shiozaki.
  - iii. Last section “Cause” in Chapter 2, 3, 4 and 5 will be eliminated because other sections already covered the possible contents of causes.
  - iv. Title of Chapter 3 was changed to “Tropospheric Ozone” from “Oxidants”.
  - v. Prof. Soon-Ung Park was suggested as the author for section 6.2.1.2, Natural Dust Sources.
  - vi. Regarding “Impacts on human health” by PM and Ozone, it was agreed that Section “2.3.1” and “3.3.1” should include the quantitative estimation of impacts on human health such as the number of premature mortality in East Asia from the viewpoint of risk assessment. In this context, it was suggested that it is important to include the papers

related to quantitative estimation of the yield loss of crops by Ozone in “3.3.2 Effects on agricultural crops.”

18. According to the discussion in the RC2, the table of contents was modified as Annex 3.

**VI. Consideration on the further process of preparation of the preliminary draft report (Agenda Item 5)**

19. The NC made a presentation on the “Preparation Schedule of the Report of the Review on the State of Air Pollution in East Asia”.

20. For the submission of the preliminary draft report of the RSAP to the Sixth Meeting of the Task Force on Research Coordination (TFRC6) and the SAC13, the followings were agreed;

- i. Co-chairpersons will present the status of preliminary draft report of the RSAP at the TFRC6 and the SAC13.
- ii. The presentation and discussion time for the TFRC6 at the SAC13 would be between 45 and 60 minutes.
- iii. At the SAC13, the NC will request the SAC members to give their comments on the preliminary draft report of the RSAP by the next Meeting of the RC in 2014.

21. For finalizing the preliminary draft report of the RSAP, the following procedure was agreed;

- i. The drafts yet to be received, except for overview of each chapter, will be collected by 15 August 2013 to finalize the preliminary draft report of the RSAP.
- ii. The summary and recommendation of each section will be developed by each author in order for lead author to draft the overview of each chapter. Author of each section will submit the summary and recommendation to the secretariat by 15 August 2013.
- iii. The lead authors will draft the overview of each chapter by 23 August 2013. Dr. Akimoto will develop Chapter 9 “Conclusion and Recommendations” referring to the overviews of each chapter.
- iv. The first draft of the preliminary draft report will be circulated around two weeks before the TFRC6.
- v. The electric copy of the preliminary draft report will be distributed in CD-ROM. Around five hard copies of the preliminary draft report will be circulated during the SAC13.

22. Executive Summary will be developed next year after modifications of contents have been completed.

**IX. Other Issues (Agenda Item 6)**



23. There were no issues raised by the participants.

**X. Wrap up of the Meeting (Agenda Item 7)**

24. There were no issues raised by the participants.

**XI. Closing of the Meeting(Agenda Item 8)**

25. The Co-chairperson expressed his deep appreciation to all the participants for their active contribution and cooperation. Then he officially closed the Meeting.

**Annex 1**

**Modified Contents of the  
“Report of the Review on the State of Air Pollution in East Asia”**

**Executive Summary**

**Chapter 1 Introduction**

**Chapter 2 PM and Haze**

**2.1 Overview**

**2.2 Atmospheric measurement and modeling**

2.2.1 Spatial distribution and seasonal variation

2.2.2 Long term trend and inter-annual variation

2.2.3 Source-receptor relationships

**2.3 Adverse impacts**

2.3.1 Impacts on human health

2.3.2 Other Impacts

**Chapter 3 Tropospheric Ozone**

**3.1 Overview**

**3.2 Atmospheric measurement and modeling**

3.2.1 Spatial distribution and seasonal variation

3.2.2 Long term trend and inter-annual variation

3.2.3 Source-receptor relationships

3.2.4 Satellite observations of tropospheric ozone and its precursors

**3.3 Adverse impacts**

3.3.1 Impacts on human health

3.3.2 Effects on agricultural crops

3.3.3 Effects on forests

**Chapter 4 Acidification and Eutrophication**

**4.1 Overview**

**4.2 Sulfur and nitrogen deposition and modeling**

4.2.1 Spatial distribution and seasonal variation

4.2.2 Long term trend and inter-annual variation

4.2.3 Source-receptor relationships

4.2.4 Biogeochemical cycle

**4.3 Impacts on ecosystem**

4.3.1 Effects on forests

4.3.2 Effects on inland water

4.3.3 Other impacts

**Chapter 5 Air Toxics**

**5.1 Overview**

**5.2 Atmospheric contamination levels and monitoring**

5.2.1 Persistent Organic Pollutants

5.2.1.1 Background air monitoring results under the GMP of the Stockholm Convention

5.2.1.2 POPs pesticides (Basic POPs)

5.2.1.3 Unintentional POPs (Dioxin-like POPs)

5.2.2 Polycyclic aromatic hydrocarbons (PAHs)

5.2.3 Heavy Metals (Mercury)

**5.3 Modeling of air toxics in the atmospheric environment**

5.3.1 Persistent Organic Pollutants

5.3.2 Polycyclic aromatic hydrocarbons (PAHs)

5.3.3 Heavy Metals (Mercury)

**5.4 Adverse impacts**

5.4.1 Impacts on human health

5.4.2 Other Impacts

**Chapter 6 Emission Inventories**

**6.1 Overview**

**6.2 Emission from natural sources**

6.2.1 Natural Biogenic

6.2.1.1 Natural Biogenic Sources

6.2.1.2 Natural Dust Sources

6.2.2 Biomass Burning

**6.3 Anthropogenic emissions**

6.3.1 SO<sub>2</sub>

6.3.2 NO<sub>x</sub>

6.3.3 NMVOC

6.3.4 Primary Particulate Matter

6.3.4.1 PM<sub>10</sub>

6.3.4.2 PM<sub>2.5</sub>

6.3.4.3 Black Carbon

6.3.4.4 Organic Carbon

6.3.5 CO

6.3.6 NH<sub>3</sub>

6.3.7 CH<sub>4</sub>

6.3.8 PAHs

6.3.9 Mercury

**Chapter 7 Mitigation Measures**

**7.1 Available control technologies**

**Chapter 8 Climate interaction and co-benefits/co-control approaches**

**8.1 Air pollution-climate interaction**

**8.2 SLCPs (SLCFs) co-benefits/co-control approach**

8.2.1 Near-term global warming and staying within critical temperature threshold

8.2.2 Benefit for human health and crop yield

8.2.3 Achieving large emission reduction

8.2.4 Recent policy initiatives for SLCPs co-benefit approach

**Chapter 9 Conclusions and Recommendations**

**References**

**Annex 2**

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**Annex 3**

**Status of First Draft Collection -the Report of the Review on the State of Air Pollution  
in East Asia (RSAP)**

Total No of Pages: 327

\* : No in parenthesis is No. of pages for references.

Chapter	Section	Author	Status of Submission	No. of Pages*		Remarks	
				Section	Chapter		
1.	Introduction	Dr. Akimoto	✓	5 (1)	5 (1)		
2.	PM and Haze				54 (16)		
	2.1 Overview	Prof. Fu	✓	6 (0)		The reference list in this section is included in that of 2.2	
	2.2 Atmospheric measurement and modeling	2.2.1 Spatial distribution and seasonal variation	Prof. Guoshun Zhuang, Prof. Fu, Dr. Kan Huang	✓		32 (10)	
		2.2.2 Long term trend and inter-annual variation					
		2.2.3 Source-receptor relationships					
2.3 Adverse impacts	2.3.1 Impacts on human health	Prof. Honda	✓	8 (3)			
	2.3.2 Other Impacts	Dr. Sase	✓	8 (3)			
3.	Tropospheric Ozone				60 (15)		
	3.1 Overview	Dr. Tanimoto					
	3.2 Atmospheric measurement and modeling	3.2.1 Spatial distribution and seasonal variation	Dr. Kanaya,	✓		34 (6)	

		3.2.2 Long term trend and inter-annual variation	Dr. Tanimoto	✓				
		3.2.3 Source-receptor relationships	Dr. Nagashima	✓				
		3.2.4 Satellite observations of tropospheric ozone and its precursors	Dr. Kanaya & Dr. Irie	✓			Dr. Irie's part will be included.	
	3.3 Adverse impacts	3.3.1 Impacts on human health	Prof. Honda,	✓	6 (1)			
		3.3.2 Effects on agricultural crops	Prof. Izuta	✓	9 (4)			
		3.3.3 Effects on forests	Prof. Izuta	✓	11 (4)			
4.	Acidification and Eutrophication							
	4.1 Overview		Prof. Cho	✓	6 (0)			
	4.2 Sulfur and nitrogen deposition and modeling	4.2.1 Spatial distribution and seasonal variation	Dr. Morino	✓	19 (2)	79 (21)		
		4.2.2 Long term trend and inter-annual variation						
		4.2.3 Source-receptor relationships						
		4.2.4 Biogeochemical cycle	Prof. Shindo	✓	10 (4)			
	4.3 Impacts on ecosystem	4.3.1 Effects on forests	Prof. Carandang	✓	23 (9)			
		4.3.2 Effects on inland water	Prof. Shindo	✓	21 (6)			
		4.3.3 Other impacts						
5.	Air Toxics					9(2)		
	5.1 Overview							



	5.2 Atmospheric contamination levels and monitoring	5.2.1 Persistent Organic Pollutants 5.2.2 Polycyclic aromatic hydrocarbons (PAHs) 5.2.3 Heavy Metals (Mercury)	Dr. Shiozaki	✓	2		Reference list is attached.
	5.3 Modeling of air toxics in the atmospheric environment	5.3.1 Persistent Organic Pollutants 5.3.2 Polycyclic aromatic hydrocarbons (PAHs) 5.3.3 Heavy Metals (Mercury)	Dr. Shiozaki / Dr. Inomata	✓	7 (2)		
	5.4 Adverse impacts	5.4.1 Impacts on human health 5.4.2 Other Impacts					
6.	Emission Inventories						
	6.1 Overview		Dr. Ohara				
	6.2 Emission from natural sources	6.2.1 Natural biogenic 6.2.1.1 Natural Biogenic Sources 6.2.1.2 Natural Dust Sources 6.2.2 Biomass Burning	Prof. Jung-Hun Woo (6.2.1.2) Prof Soon-Ung Park Prof. Savitri	✓	14(3)		
	6.3 Anthropogenic emissions	6.3.1 SO <sub>2</sub> 6.3.2 NO <sub>x</sub> 6.3.3 NMVOC 6.3.4 Primary Particulate Matter 6.3.5 CO 6.3.6 NH <sub>3</sub> 6.3.7 CH <sub>4</sub> 6.3.8 PAHs 6.3.9 Mercury	Dr. Kurokawa (6.3.8) Dr. Inomata	✓	14 (2) 6 (2)	34 (7)	
7.	Mitigation Measures					57 (3)	Supporting Information is

	7.1 Available control technologies		Prof. Shuxiao Wang		57 (3)		attached.	
8.	Climate interaction and co-benefits/co-control approaches					15 (1)		
	8.1 Air pollution-climate interaction		Prof. Rokjin Park					
	8.2 SLCPs (SLCFs) co-benefits/co-control approach	8.2.1 Near-term global warming and staying within critical temperature threshold		Dr. Akimoto	✓		15 (1)	
		8.2.2 Benefit for human health and crop yield						
	8.2.3 Achieving large emission reduction							
		8.2.4 Recent policy initiatives for SLCPs co-benefit approach	Prof. Suzuki					
9.	Conclusions and Recommendation		Dr. Akimoto	✓	14(0)	14(0)		

Total Number of Pages: 327\* : No in parenthesis is No. of pages for references.

ANNEX 3

**List of Authors and Contributors**  
**- Report of the Review on the State of Air Pollution in East Asia -**

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**ANNEX 4**

**Preparation Schedule of the Report of the Review on  
the State of Air Pollution in East Asia (RSAP)**

<b>Year</b>	<b>Month</b>	<b>Activities/Events</b>	<b>Deliverables</b>
2011	October	TFRC4 and SAC11 (SAC agreed to refer the RSAP into TFRC.)	Report of Session of SAC11
	November/December	IG13 (IG took note that TFRC will review the state of air pollution in East Asia.)	Report of Session of IG13
2012	November	TFRC5, SAC12 and IG14 (Establishment of RC was presented and assignment of RC members was reported.)	<ul style="list-style-type: none"> <li>- Report of TFRC5</li> <li>- Report of Session of SAC12</li> <li>- Report of Session of IG14</li> </ul>
2013	February	1 <sup>st</sup> Meeting of the RC Preparation of minutes of the meeting of the RC	<ul style="list-style-type: none"> <li>- Draft Contents of the RSAP</li> <li>- Names and contacts of DC members</li> <li>- Lead Authors and Contributors of the RSAP (Organization)</li> <li>- Work Schedule (Implementation Plan)</li> </ul>
	February	RC1 minutes of the meeting to be sent to RC members	RC1 Minutes of the Meeting
	February-	Compilation and communications with contributors and Lead Authors	<ul style="list-style-type: none"> <li>- Confirmation of authors of each chapter, items etc.</li> <li>- Clarification of responsibilities</li> </ul>
	~ End of June	Submission of manuscripts and Circulation to Lead Authors	<b>Early stage of preliminary draft of some sections of RSAP</b>
	2-3 August	2 <sup>nd</sup> Meeting of the RC Preparation of minutes of the meeting of the RC	
	August	Circulation of preliminary draft among RC	<ul style="list-style-type: none"> <li>- <b>Completed Preliminary Draft Report of the RSAP</b></li> <li>- <b>Report of Co-Chairpersons of RC to TFRC6 and SAC13</b></li> </ul>
	24-27 September	TFRC6 and SAC13 Submission of the Preliminary Draft Report of the RSAP	<ul style="list-style-type: none"> <li>- Report of TFRC6 to SAC</li> <li>- SAC Chairperson's Report to IG15 (and to WGFD12)</li> <li>- Report of Session of SAC13</li> </ul>
	October & December	WGFD12/IG15 NC/Chairperson of SAC reports of progress and Preliminary Draft Report of the RSAP to WGFD12/IG15	<ul style="list-style-type: none"> <li>- Report of Session of WGFD12</li> <li>- Report of Session of IG15</li> </ul>
2014	January/February	3 <sup>rd</sup> Meeting of the RC Preparation of minutes of the meeting of the RC	<ul style="list-style-type: none"> <li>- Review of the Preliminary Draft Report</li> <li>- Work plan toward the completion of the Final Draft</li> <li>- Minutes of Meeting</li> </ul>

	April	<b>Circulation of First Draft of the Final Draft among RC members, contributors and Lead Authors for comments</b>	Comments from RC members, contributors and Lead Authors
	June	Revision of First Draft with comments from RC members, contributors and Lead Authors	Second draft of the Final Report of the RSAP
	June/July	4 <sup>th</sup> Meeting of the RC Preparation of minutes of the meeting of the RC	Comments from RC members and Lead Authors
	June/July	Report of RC meeting sent to RC members	Report of RC meeting
	August	Revision of Second Draft to include comments from RC meeting	Third draft of the Final Report of the RSAP
	August/September	Circulation and revision of Third Draft to RC members, contributors and Lead Authors for comments Drafting of Executive Summary	Fourth draft of the Final Report of the RSAP and Draft Executive Summary
	September	Revision of Executive Summary to include comments from the RC members	Fifth Draft of the Final Report of the RSAP
	September/October	TFRC7 and SAC14 Preparation of the Report of the Chairperson of TFRC to SAC14 Presentation of Final Draft of the report of the RSAP and Executive Summary at SAC14 for approval	<ul style="list-style-type: none"> <li>- Final Draft Report of the RSAP and Executive Summary at TFRC7</li> <li>- Report of the Chairperson of TFRC to SAC14</li> <li>- Approved Report by SAC14</li> <li>- Report of Session of SAC14</li> </ul>
	October-December	WGFD13 and IG16 NC/Chairperson of SAC submits the approved Report of the RSAP and Executive Summary as a basis of the discussion of future expansion of scope of EANET	<ul style="list-style-type: none"> <li>- Report of Session of WGFD13</li> <li>- Report of Session of IG16 (including decision on future expansion of the scope of EANET as appropriate)</li> </ul>
	December	Language Check	Final Draft of the Report of the RSAP checked by language expert
	December 2014/January 2015	Printing and distribution of the report of the RSAP	



**Attachment 2**

**Views and Comments of the TFRC6, the SAC13 and WGFD12 on the Preliminary Draft Report of the Review on the State of Air Pollution in East Asia**

1. The Preliminary Draft Report of the Review on the State of Air Pollution in East Asia was submitted for review and discussion from scientific and technical viewpoints to the Sixth Meeting of the Task Force on Research Coordination (TFRC6) and the Thirteenth Session of the Scientific Advisory Committee (SAC13) on the EANET on 24 and 25 – 27 September 2013 in Xiamen, China, respectively, and for review, comments, suggestions and/or recommendations to the Twelfth Session of the Working Group on Future Development (WGFD12) of the EANET on 14-15 October 2013 in Chonburi, Thailand.
2. Major comments and discussions at the TFRC6 included,
  - To consider a possibility to publish the Review in academic journals in addition to make as EANET publication; consideration should be done in a view whether it's appropriate to submit to academic journals not a whole report but the parts of topics or subjects.
  - The structure of Executive Summary and Chapter 9 (Conclusions and Recommendations) needs to be well considered, in particular, to avoid unnecessary interference; for clear recommendations or Executive Summary content a style of answers on listed up questions could be considered as helpful.
  - Regarding to the content of presented draft, it's very important that some parts, for example, of Chapter on Air Toxics, have to include more materials not only on the state of the pollution but also on effects on human health and adverse impacts.
3. Major comments and discussions at the SAC13 included,
  - The SAC members are welcomed to provide comments by 27 December 2013.
  - The Chair clarified that the review has been made based on the peer-reviewed papers in scientific journals. Lead authors, authors and contributors have been selected and the preliminary draft report is already completed.
  - The Chair of the RC clarified that the 'other impacts' are those impacts that are not classified under previous subsections.
  - It was also clarified that referencing statements will be considered.
4. Major comments and discussions at the WGFD12 included
  - It was pointed out that the SAC may not be in the position to approve the Review Report but could discuss the Review Report before submission to the IG for reference.
  - It was suggested that the SAC may only endorse the Review Report.
  - It was pointed that the Report of the Review on the State of Air Pollution in East Asia is being prepared by invited internationally known experts. If necessary, qualified experts from outside the EANET could be invited to provide comment on the draft Review Report for the consideration at the SAC.

- It was clarified that the draft Executive Summary of the Review Report will be developed early next year for later submission to the Fourteenth Session of the Scientific Advisory committee (SAC14).