



# Accurate Monitoring of Surface Ozone Virtual Workshop 5-9 October 2020

## *Implementing a Globally Coordinated Change in Ozone Cross Section Value for Surface Ozone Monitoring*

**Goal:** To develop a plan and timetable, which will allow a globally coordinated and universal implementation of the value published in 2019 for the ozone absorption cross-section at 253.65 nm, and required for the measurement of surface ozone concentrations around the world.

**Monday 5 October**

**12:00 – 14:30 UTC+2**

### **Surface Ozone measurement and its impact / Survey feedback**

Session Chair: *P. Brewer*, Moderator: *R. I. Wielgosz*, Rapporteur: *J. Carney*

12.00-12.10	Welcome, introduction and workshop aims	<i>P. Brewer, NPL</i>
12.10-12.25	Impact of surface ozone on human health and the environmental	<i>M. Wichmann-Fiebig, UBA</i>
12.25-12.30	Questions	<i>Moderator</i>
12.30-12.45	The 2019 Ozone Cross-Section consensus value at 253.65 nm	<i>J.T. Hodges, NIST</i>
12.45-13.00	Questions	<i>Moderator</i>
13.00-13.15	Benefits to uniformity of atmospheric ozone measurements	<i>Owen Cooper, NOAA, USA</i>
13.15-13.25	Questions	<i>Moderator</i>
13.25-13.40	Impact of the ozone cross-section on air quality compliance	<i>A.C. Lewis, NCAS, Uni- York</i>
13.40-13.45	Questions	<i>Moderator</i>
13.45-14.00	Results of the <a href="#">on-line survey</a>	<i>J. Viallon, BIPM</i>
14.00-14.15	Questions and Discussion	<i>Moderator</i>
14.15-14.30	Confirmation of Task group Membership and plans for next days	<i>R.I. Wielgosz, BIPM</i>

**Tuesday 6 October**

**12:00 – 14:45 UTC+2**

**International standards, calibration services and monitoring networks**

Session Chair: *S. Lee*, Moderator: *J. Viallon*, Rapporteur : *I. Chubchenko*

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|-------------|---|---|
| 12.00-12.15 | Primary Surface Ozone Standard Reference Photometers and BIPM.QM-K1   | <i>J. Viallon, BIPM</i>                                   |
| 12.15-12.45 | Calibration services for ozone standards and instruments<br>Within United States of America<br>Within Switzerland | <i>J. Norris, NIST</i><br><i>B. Niederhauser, METAS</i>   |
| 13.00-13.15 | Past ozone cross-sections transitions in Total Ozone measurements   | <i>D. Tarasick, Environment and Climate Change Canada</i> |
| 13.15-13.30 | Questions and discussion on measurements, standards and Calibrations  | <i>Moderator</i>  |
| 13.30-13.45 | Asia Network  | <i>H. Tanimoto, NIES</i>                                  |
| 13.45-14.00 | Californian Network   | <i>L. Sorensen, CARB</i>                                  |
| 14.00-14.15 | Aquila and European Air quality Reference Laboratories  | <i>A. Borowiak, JRC</i>                                   |
| 14.15-14.30 | Questions and discussion on monitoring networks   | <i>Moderator</i>  |

**Wednesday 7 October**

**12:00 – 14:30 UTC+2**

**Air Quality normative aspects; Ozone analyser manufacturing**

Session Chair: *J.T. Hodges*, Moderator: *J. Carney*, Rapporteur *A. Borowiak*

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|-------------|--|---|
| 12.00-12.15 | CEN perspective  | <i>B. Stacey, Ricardo</i>                                 |
| 12.15-12.30 | Ozone traceability, surface monitoring impacts, and potential implementation issues in the United States   | <i>Joann Rice, US EPA</i>                                 |
| 12.30-12.45 | The ozone traceability scheme and QC system in China, the possible influence of new cross section in China | <i>Dr. Yaolong,</i>                                       |
| 12.45-13.00 | Impact on national ozone monitoring network by the new ozone absorption cross-section value in Korea       | <i>J-H Park, NIER, Korea</i>                              |
| 13.00-13.15 | Questions and discussion on monitoring networks  | <i>Moderator</i>  |
| 13.15-13.30 | National surface-level ozone analyzers in Russia   | <i>V.P. Chelibanov, ITMO UNIVERSITY, Saint-Petersburg</i> |
| 13.30-13.45 | Ozone analysers manufacturing at Envea   | <i>R. Akiki, Envea</i>                                    |
| 13.45-14.00 | Questions and discussion for Ozone Analyser Manufacturers  | <i>Moderator</i>  |
| 14.00-14.15 | Break-out sessions and plans for remaining days  | <i>R.I. Wielgosz, BIPM</i>                                |

Thursday 8 October

12:00 – 14:00 [UTC+2](#)

### Break out Session for Task Groups

12:00-  
14:00 Breakout sessions for 4 Task Groups

TG1: Identifying and implementing change

TG2: Time line for Change

TG3: Communicating Change

TG4: Managing Change

*Task Group Chairs,  
Moderators and Members*

Friday 9 October

12:00 – 14:30 [UTC+2](#)

### Feedback from Task Groups, Conclusions and Recommendations

Session Chair: [P. Brewer](#), Moderator: [R.I. Wielgosz](#), Rapporteur: [J. Viallon](#)

12.00-12.15 TG1 Report: Identifying and implementing change

*Chair Task Group 1*

12.15-12.30 TG2 Report: Time line for Change

*Chair Task Group 2*

12.30-12.45 TG3 Report: Communicating Change

*Chair Task Group 3*

12.45-13.00 TG4 Report: Managing Change

*Chair Task Group 4*

13.00-13.45 Questions and Discussion

*All with Moderator*

13.45-14.15 Conclusions and recommendations

*All with Moderator*

14.15-14.30 Final comments and next steps

*P. Brewer, NPL*

### Task-groups:

Four Task Groups will be constituted during the first day. They will discuss electronically the questions below in addition to the results of the [on-line survey](#), and will report on their outcomes during the last day.

#### TG1: Identifying and implementing change

- How do we clearly identify the change being made?
- Will a change be mandatory or voluntary?

#### TG2: Time line for Change

- How much time is required to prepare for change?
- What is a reasonable implementation date and schedule?

#### TG3: Communicating Change

- How do we best publicise the change and its date/schedule decided for this?
- What information needs to be provided for stakeholders?

#### TG4: Managing Change

- How do we best identify risks in making the change and mitigate them?
- How do we deal with historic data?

### Steering Committee Members :

P. Brewer (NPL), *chair* / J. Viallon (BIPM), *Executive Secretary* / R.I. Wielgosz (BIPM)  
S. Lee (KRISS) / I. Chubchenko (VNIIM) / J. Carney, J.T. Hodges, J. Norris (NIST)  
K. Saarnio (FMI) / N. Ntsasa (NMISA) / A. Borowiak (JRC)