

**To: Advisory Panel on North Pacific Coastal Ocean Observing Systems (AP-NPCOOS)**  
**Subject: Agenda for October 17, 2015 meeting during PICES Annual Meeting, Qingdao, China**

**From:** Jack Barth (U.S.A.) and Sung Yong Kim (Republic of Korea), Co-Chairs

The PICES Advisory Panel on North Pacific Coastal Ocean Observing Systems (AP-NPCOOS) will hold its inaugural meeting from 1400-1800 on October 17, 2015, in Qingdao, China. For more about our Advisory Panel and PICES, see [http://pices.int/members/advisory\\_panels/AP-NPCOOS.aspx](http://pices.int/members/advisory_panels/AP-NPCOOS.aspx)

We have listed the AP-NPCOOS Terms of Reference and Membership list at the end of this memo for your convenience. We are pleased that you are willing to help us accomplish the goals of the Advisory Panel.

Our **AP-NPCOOS meeting** will be preceded by the AP-NPCOOS workshop W6 “Best practices for and scientific progress from North Pacific Coastal Ocean Observing Systems.” (For more details, please see Appendix 1.) The **W6 Workshop** is scheduled for **0855 to 1250 on Saturday, October 17, 2015**. There will be a lunch break between W6 and the AP-NPCOOS meeting. Thanks to those of you who have submitted abstract to the W6 Workshop! You’ll see that convening workshops is included as Term of Reference #2 for our Advisory Panel (Appendix 2).

Please find an agenda for our AP-NPCOOS meeting below. We look forward to seeing you in Qingdao and an exciting discussion of coastal ocean observing!

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## Advisory Panel on North Pacific Coastal Ocean Observing Systems (AP-NPCOOS)

### Agenda

October 17, 2015

Qingdao, China

0855-1250	AP-NPCOOS W6 workshop “Best practices for and scientific progress from North Pacific Coastal Ocean Observing Systems.”
1250-1400	Lunch
1400	Introduction of AP-NPCOOS (Co-Chairs Barth and Kim)
1415	Introduction of AP-NPCOOS members (members)
1430	Discussion of how to fulfill AP-NPCOOS Terms of Reference
1500-1630	Coastal Ocean Observing Systems in PICES member countries (members); 15-minute presentation by all 6 member nations
1630	coffee break
1650-1800	Discussion of AP-NPCOOS issues, questions (below) and next steps
1800	End

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### 1) Questions to consider for our AP-NPCOOS Annual Meeting

- What are “best practices” for coastal ocean observing platforms, sensors and sensor calibration, data quality control, user interfaces to data and information products, data delivery to users, data archiving? (Term of Reference #1)
- How can AP-NPCOOS advise/assist FUTURE? (Term of Reference #3) FUTURE is the PICES Scientific Program “Forecasting and Understanding Trends, Uncertainty and Responses of North Pacific Marine Ecosystems”  
([http://pices.int/members/scientific\\_programs/FUTURE/FUTURE-main.aspx](http://pices.int/members/scientific_programs/FUTURE/FUTURE-main.aspx))
- What is relationship of AP-NPCOOS and CREAMS? And MONITOR? And TCODE?
- How might AP-NPCOOS advise/assist PICES in preparation of the North Pacific Ecosystem Status Report (<http://pices.int/projects/npest/default.aspx>)? (Term of Reference #3)
- How might AP-NPCOOS relate to global programs like GOOS, Argo, Pogo, etc? It might be helpful to visit the GOOS page (<http://www.ioc-goos.org/>). (Term of Reference #3)
- What are the motivations and applications for your country’s coastal ocean observing (e.g., fisheries, shipping, aquaculture, etc.)?

- What is unique to AP-NPCOOS that is not being covered elsewhere in PICES or internationally? For example, AP-NPCOOS is definitely “coastal,” but what about other unique aspects?
- What open-ocean observing assets are most relevant to your coastal issues and how are they linked into your coastal ocean observing systems? If they are not lined in efficiently, how might that be done?

**2) Request for materials in advance of AP-NPCOOS meeting. Due to Co-Chairs by August 31, 2015.**

- Please provide a map and list of coastal ocean observing assets for your country. This might include moorings, shore stations, ship-based measurements (especially cross-shelf sections), autonomous vehicles, cabled observatories, etc. Please include the list of sensors and variables that are being measured, and how frequently they are observed. We know this is a big effort, but ask that you do the best you can to provide an overview and as many details as possible. We can build on these maps and lists over time.
- Please provide a list, either from your country or ones you know of internationally, of “best practices” documents. These might include documents on sensor maintenance, calibration, quality control, data delivery, etc. Examples include the “PICES Special Publication 3: Guide to best practices for ocean CO<sub>2</sub> measurements” ([http://cdiac.ornl.gov/oceans/Handbook\\_2007.html](http://cdiac.ornl.gov/oceans/Handbook_2007.html))
- Please provide a list of technical groups, meetings, workshops in each country that deal with coastal ocean observing and provide their contact information.

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**Appendix 1**

**AP-NPCOOS Workshop W6 “Best practices for and scientific progress from North Pacific Coastal Ocean Observing Systems”**

[Note: This workshop builds on the successful workshop W4 “Networking ocean observatories around the North Pacific Ocean” held last October, 2014, in Yeosu, South Korea.]

**Co-Convenors:**

Sung Yong Kim (Korea)

Jack Barth (USA)

Tony Koslow (USA)

**Invited Speakers:**

David M. Checkley, Jr. (Scripps California Cooperative Oceanic Fisheries Investigations, CalCOFI, USA)

Daji Huang (Second Institute of Oceanography, State Oceanic Administration, China)

Song Sun (Institute of Oceanology, Qingdao, China)

The collection of time series of high-quality physical, chemical and biological data from coastal ocean observatories is critical to the PICES science mission. Coastal ocean observing data are important for documenting changes in coastal ocean ecosystems and for driving numerical circulation and biogeochemical models. There is broad agreement that the ‘operators’ of coastal observing systems around the North Pacific would benefit from developing best practices – basically sharing experiences on what works and what does not work. At the same time, there have been significant advances in scientific understanding using coastal ocean observing systems. In recent years and in the near future, there has been a big increase in the number of permanent coastal ocean observing systems around the North Pacific. These observatories include shore-based instrumentation, very shallow installations near the coast and in semi-enclosed bays, as well as observatories that span from the coast to full ocean depth. We seek contributions that illustrate the growing number of coastal ocean observatories across the PICES member countries. Examples of topics to be considered for ‘best practices’ for coastal ocean observing systems include:

- Observing platforms (cabled nodes, autonomous vehicles, moorings, profilers, shore-based instruments, *etc.*),
- Sensors and sensor calibration, including physical, optical, biogeochemical, bioacoustics sensors,
- Data quality control,
- User interfaces to data and information products, with user interfaces varying, depending on their intended audience, *e.g.*, observatory operators, scientists, ocean users,
- Data delivery to users, in particular, to numerical modelers
- Data archiving.

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## **Appendix 2**

### **AP-NPCOOS Terms of Reference**

1. Develop and advise about best practices for coastal ocean observing systems (examples of topics to be considered include: observing platforms, sensors and sensor calibration, data quality control, user interfaces to data and information products, data delivery to users, data archiving);
  2. Convene workshops/sessions to engage those involved in coastal ocean observing systems from around the North Pacific;
  3. Advise on linkages between coastal ocean observing systems and both PICES activities (*e.g.*, FUTURE Science Program, North Pacific Ecosystem Status Report) and open-ocean observatories (*e.g.*, Argo).
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## Appendix 3

### AP-NPCOOS Membership as of June 2015

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