Common Themes

National capacity
- Many countries do not have vibrant weather market to regulate, in the first place. Development and expansion of market is a matter of priority that should be supported by the national legislative framework.
- Investing to and support NMHSs in developing world, and ensuring the relevance (to the core role) of NMHS to deliver public services, are critical.
- Private sector could provide leverage to improved public services – for example, wider and faster dissemination of warning, testing and verifying new technologies, etc. – to the work of NMHSs and public sector, under the situation of limited resources. Such arrangements should be sought in consideration of individual nations' situation.
- A more integrated approach is required at the national level, for example, collective deliberation among ministries of finance, science, internal affairs, etc.

Open data policy
- NMHSs consider data sales as a revenue stream, subsequently, seeking alternative funding to compensate the compliance of open data policy.
- Some NMHSs are not well-equipped to advocate open data policies - ideally this would come from user-beneficiaries as demand-driven.
- The expansion of weather enterprise beyond the Hydromet community will help not only to advocate open data policies but also to support securing the public sector budget (for NMHSs).
- (Respective) National legislative frameworks need to support continuing public-private sector interactions and mechanisms and materialize/incentivise mutual benefits of open data policies (e.g. tax benefit, budget assignment, sustained investment for NMHSs operation)

Good practices for national legislative frameworks
- The Global Weather Enterprise is continuously seeking good examples for national legislative frameworks. Some good practices are acknowledged – such as, US (governmental) funding policy, Japan’s permissive oversight for private sector. The need to adaptive development to different national setting (e.g. to a broad national policies and regulations beyond the weather business) is fundamental.
- A transition of ideas is needed, from competitive relationships to mutually supportive relationships, between private and public sectors. To this end, a legislative framework should enable the effort to identify the respective strengths and play the roles therein.
- The primary goal is to better serve the general public. In this context, setting good practices of public-private collaboration for key delivery is recommended – e.g., producing and delivering early warnings to vulnerable sectors. The process could be stimulated by bringing a third party to the table (such as, national emergency management and civil protection entities), and extending the integration of public service beyond the weather (e.g. health information services for epidemies). Demands on, and subsequently, conduct of such cross-boundary/cross-sectoral developments are happening in some areas of emergency management and long-term planning.
Chat Digest

from ChiMing Peng Weatherrisk to Everyone: 3:26 PM
Is there any good law or policy for PPE example? Still existing competition between government and private sector everywhere.

from François Humbled RMI to Everyone: 3:29 PM
NMHS got significant revenues from commercial activities. Open data policy killed those revenues, with no alternative funding. Is there any action to support NMHS funding?

from Alan to Everyone: 3:29 PM
Could you comment on what could stimulate a government to develop a regulatory framework when it doesn't exist? Is it a matter of lobbying governments? Should NMHSs have a role to help to this?

from ChiMing Peng Weatherrisk to Everyone: 3:33 PM
Japan JMA owned JMBSC, is it a good model?

from Janot-Reine Mendler de Suarez (internal) to Everyone: 3:36 PM
Met services are not usually well-equipped to advocate for open data policies - ideally this would come from user-beneficiaries as demand-driven, so perhaps the enormous expansion of weather enterprise that could be stimulated may be better driven by partners beyond the HydroMet community - your perspectives?

from Fred Branski to Everyone: 3:39 PM
Often there is a presumption that the private and government sectors have to have a competitive relationship. It is quite possible that, instead, they can have a co-supportive relationship. That they can both operate to address where there key strengths are and where they can best deliver to public and/or private safety. It's important to look at how this co-supportive relationship can be built.

from Janot-Reine Mendler de Suarez (internal) to Everyone: 3:45 PM
exactly - recognition by govt that adequate reliable sustained HydroMet investment combined w/open data policy can be an economic Stimulus that includes but is not limited to weather enterprise

from Jyoti Bisbey to Everyone: 3:48 PM
Agree. Role of public sector is policy, regulations, setting compliance requirements and standards, coordinating among governments agencies and most importantly responsible for public's safety. Private sector has a role to play in proving these services according to the best efforts in compliance to the regulations and standards, private sector can be more agile and provide resources to where needed in more innovative way. Both sides need to work together.

from Alexander Mirescu to Everyone: 3:49 PM
That's true, Jyoti. I would only add that engaging both entities really comes together when it comes to EWS.

from Alexander Mirescu to Everyone: 3:50 PM
I would go one step further that we need to look much more intensely toward impact-based forecasting to see
how we can tailor early warning to particularly vulnerable sectors
from Courtney Draggon to Everyone: 3:50 PM

Exactly and in terms of finding revenue for the NMHS that has been lost due to open data (as referenced above). The revenue generated by the stimulated pvt sector adds tax revenue back to the public sector which could be used to increase budgets allocated to the NMHS to provide foundational services society relies on including the data available to pvt sector. Sectors that benefit from publicly-funded services (i.e. data) are the best at lobbying government to enhance NMHS budgets.
from Janot-Reine Mendler de Suarez (internal) to Everyone: 3:51 PM

private sector can also be better prepared than govt to shoulder risks inherent in testing & development of new products and services
from Alexander Mirescu to Everyone: 3:51 PM

Warnings are obviously a tremendously important and beneficial tool. But, if we share with people not only warning but inform folks about 'how weather will behave' and in turn how their built environments may behave.
from Alan to Everyone: 3:54 PM
I agree with you Courtney. But I wonder if governments recognise that the corporate tax revenues from the weather private sector should in part be used back into the NMHS? Somehow I think this is a missing link in most countries.
from Ian Lisk to Everyone: 3:55 PM
Visibility of NMHS within Gov always a challenge!
from Milan DACIC to Everyone: 3:56 PM
Hi Alan, every government has broader legislative framework. I think the point is to engage NMHSs to fit their mandates into existing laws, either by having a bylaw regulating the work and purpose/duties of the NMHSs and other entities, or by developing an independent law which connects to the other (e.g. Law on disaster risk reduction and disaster management, Law on spatial planning, law on natural resources, and alike). "Lobbying" part is to work together with other disciplines to "mention" the role of the NMHSs and other entities in their laws.
from Courtney Draggon to Everyone: 3:57 PM
Yes always a challenge! I agree with you in general, Alan. However, if you set up ongoing, collegial dialogues among the NMHSs and pvt sector these matters can be flushed out and a mutual understanding of how to support each sector can be established. NMHS make clear where they will and will not provide services so pvt sector sees where there is market space; pvt sector can understand the challenges NMHSs face including with visibility with gov. This does take time to build trust and time to engage in these dialogues.
from Courtney Draggon to Everyone: 3:58 PM
time = challenge too!
from Bob Goldhammer to Everyone: 3:58 PM
The challenge that we are discussing right now has an inherent obstacle in that "we" are trying to encourage many NHMS entities to change their basic way of operation. This often results in a loss of not just revenue but power. As the primary goal of the desired change is to better the situation for the general public in regard
to weather information and warning dissemination, maybe the process could be enhanced by having a third party with no concern for revenue or power involved in the discussion. May I suggest that the country's emergency management/public safety entity be "at the table" to help effect the desired change?

IMO also a great comparative example of the constructive tension between parallel regional and technical/thematic processes

Re: JMA model. With increasing innovation and use of JMA data for competitive private sector market, how does JMA retain authoritative/trusted voice with public? Do public have too many options on offer to know which early warnings to listen to/take action on?

Going back to Alexander's point on focusing on both immediate respond to immediate danger and forecasted data to plan for adaptive planning, this would also require more integrated approach with other ministries and with finance/economy. Often times the adaptive divisions are sitting with one ministry or agency and rest are continuing BAU.

Bob, this is a very critical point and, yes, national emergency management and civil protection entities need to be at the table and play a critical role. excellent point!

How does the private sector feel the force of WMO Res 40 etc? Perhaps they don't know much about WMO technical regulations (= guidelines actually). Companies I know about have little knowledge of WMO "regulations" - why would they?!

Jyoti, you bring up the good point of adaptive strategies, which links directly to forecasted impacts. So, how do we create legislative frameworks whereby other stakeholders, for example, municipal planning and zoning boards, have the opportunity to provide inputs and can ask what data they need.

@Bob - completely agree. Having your users at the table too is critical

Jyoti, where I am going with this is - either civil protection or urban planners - good hydromet data and impact models can better inform resilience and emergency/humanitarian responses.

In reality the boundaries between disaster management EWS and increasingly targeted 'sectoral' services are beginning to blur; for example Haiti's cholera forecasting model combines real-time epidemiological surveillance & hydromet data to anticipate risk that can prevent/mitigate epidemic where and when risk factors intersect - the Met service has no role in this beyond BAU provision of rainfall forecasting - just one practical example for harnessing Big Data to anticipate and manage complex risks!

There are a number of countries we are working with that do not have vibrant weather market to regulate in
the first place. National regulation is important, but in those countries, it is important to consider how to incentivize the development of market as well if we believe such a development will lead to better service provision and broader socio-economic benefits.

from Bob Goldhammer to Everyone: 4:10 PM
I like to think of it not as boundaries blurring but as partners blending their strengths and capabilities for the better good.

from Ian Lisk to Everyone: 4:12 PM
Impact-based forecasting and warning is dependant on multi-discipline collaboration and partnerships...

from Alan to Everyone: 4:14 PM
Thanks Stella. But is it up to NMHS to raise WMO regulations as a way to stimulate government to introduce a national regulator. Some NMHS might prefer not to raise this with their government - they don't have an incentive to do so.

from Janot-Reine Mendler de Suarez (internal) to Everyone: 4:18 PM
Agree Bob! in reality the process from coordination to cooperation to collaboration means new ways of working that can trigger inter-agency turf tussles over who controls data, who develops or owns the models, who gets the funding, etc.

from Nyree Pinder to Everyone: 4:21 PM
Fascinating discussion again @Vladimir @Dimitar and thanks for organising. Thanks too to all panellists. Look forward to the next one, Nyree

from François Humbled RMI to Everyone: 4:25 PM
Thank you, Steve, I like your answer! In this matter, the US funding policy is a good example we should follow (instead of the current situation where public sector is encouraged to find part of its own revenues!)

from Alan to Everyone: 4:26 PM
Francois - it would be fine for an NMHS to enter commercial services if there is a genuinely level playing field.

from Oluwaseun Wilfred IDOWU to Everyone: 4:31 PM
I am late but from the ongoing conversation, most Africa NMHSs have limited infrastructure while trying to survive within the current financial realities. Most of their attitudes towards data sharing and exchange is coming from their capacity for cost recovery.

from Alan to Everyone: 4:32 PM
No such thing as foundational data! All public data should be open.

from Ivan to Everyone: 4:36 PM
It's vital to build up incentive environment for NMHSs to put into effect open data policy, e.g. by partnership between NMHSs and WMCs / RSMCs (NMHSs data provision - WMCs / RSMCs data quality control feed-back + WMCs / RSMCs product) and as a healthy fuel for NMHSs towards building up relation with a private sector (data / information production - data / information provision) ... Note: unluckily I only able to chat

from Fred Branski to Everyone: 4:38 PM
Alan’s point is very important and we have touched on it a bit in the chat. Many developing countries have significant financial factors that affect their ability to deliver services. This directly influences their consideration around selling data. Jon's example of the private sector acting to offset the dissemination
challenges of the gov sector can be one way to improve the budget situation. In any case, solutions must be oriented to individual nations' situation.

from Oluwaseun Wilfred IDOWU to Everyone: 4:38 PM
For NMHSs within the African community to fully tap into the PPE opportunities, a strong legal framework is required to mutually protect both the NMHSs and Partners so as not to render the NMHSs irrelevant especially when they are perceived as commercial competitors.

from Gerald Fleming to Everyone: 4:41 PM
To add to the points articulated by Fred - in many developing countries the NMHSs live almost "hand to mouth" as they are provided with funds as and when the government can provide them. In these countries there can be no meaningful annual budgeting as the countries cannot reliably predict tax income and many cannot access borrowed money for current expenditures. So it is not surprising that the NMHSs try to hold on to whatever income they can collect, even if this appears small in relation to those of us in the developed world.

from Ercan Buyukbas to Everyone: 4:42 PM
Hi everyone,
I think there are some critical issues which should be considered for the legislative framework of PPE:
1) How the roles of NMHSs and private sectors should be defined either being partners or competitors?
2) How the positions of NMHSs and private sectors should be defined for authority and responsibility for the warnings against hazards?

from Bob Goldhammer to Everyone: 4:45 PM
Alexander's comment about getting community planners and others to the table ALSO is well taken. This can often be accomplished through an active emergency management program which includes representatives of many organizations within its program. This is not a new connection need. The hazard mitigation planner that I hired more than twenty years ago was actually working on his Master's program in community and Regional Planning. He had limited background in emergency management. I taught him the emergency management "stuff" which couple with his background in community and regional planning well suited him to take over for me when I left my EM director position.

from Bob Goldhammer to Everyone: 4:49 PM
@Ian Recognizing the importance of the weather forecasting and warning value chain is key to future success!

from Ian Lisk to Everyone: 4:50 PM
Governments recognizing that certainly is!!