



# OEB Green Button - IWG

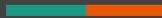
Independent ( Industry Led) Working Group for the implementation of Green Button in Ontario



# IWVG - Agenda for Today

- **OEB Staff Greeting**
- **Introductions** – Gary – 5 min.
- **Administrative** (how is this going to work) – Gary – 20 min.
  - Updates from last meeting Q & A (Slido)
  - Update Technical Sub (ITWG) - Working Group Starts next Monday: next 3 Mondays
  - New - User Experience (IUXWG) Sub - Working Group (Mondays: next 3 weeks)
  - New - Utility only (IUWG) Sub - Working Group (next 4 weeks)
- **Review / Discuss - Security and Privacy of Data - 45 minutes**
- **List of Previous Items / Summary / Next steps - 15 minutes**

# Administrative - General



- Meetings – Weekly at least till the end of March
- When Asking Questions please state your company name
- Meeting Etiquette
- This Week: Security and Privacy of Data
- Next Week: Sub Working Group updates and Other priority items
  - Last week chat items - integrated into this weeks presentation
- Establishing new sub working groups
- 21 months left



# Results From 202 02-17

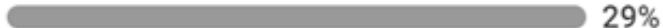
What category of participant are you?

38

Utility



Vendor to Utilities



Third-Party Service Provider



Bldgs/Facilities Rep.



Gov't, NGO, advocate, etc.



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# What category of participant are you?

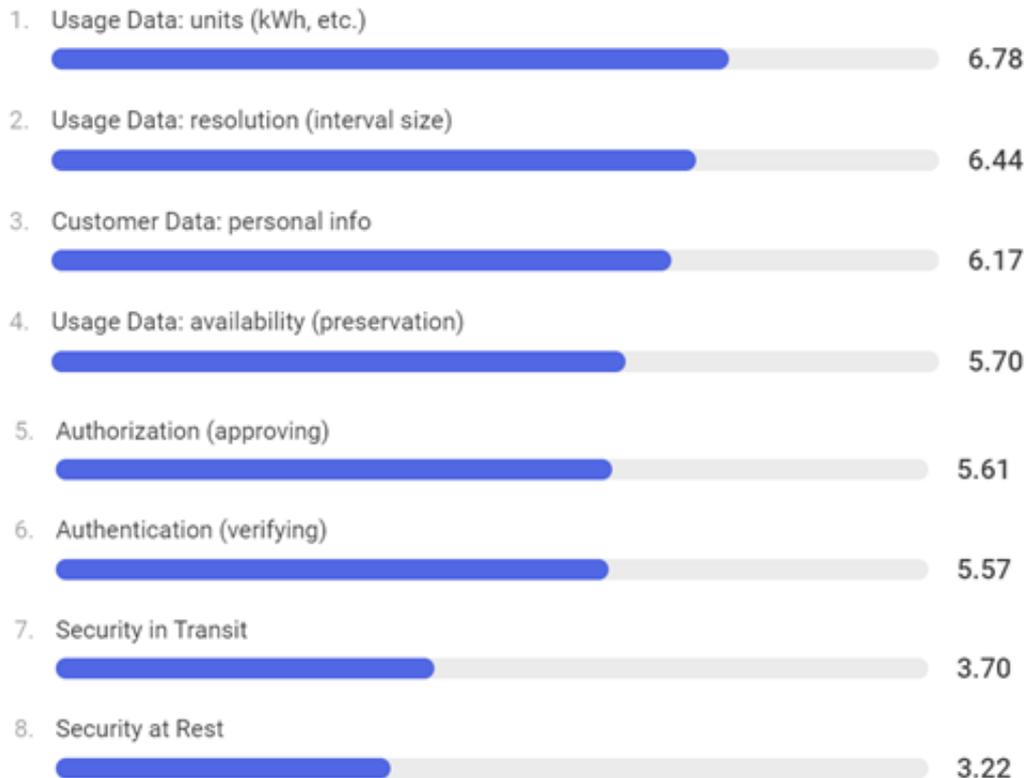
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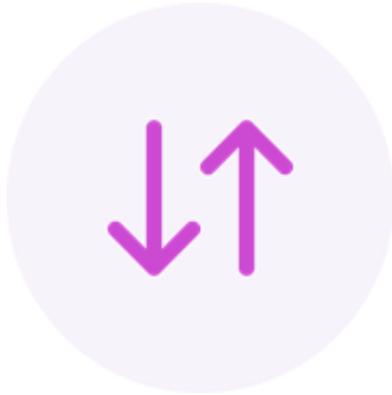
# Results From 2022-02-17

## What's most-important to you for this Workgroup?

23 



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**What's most-important to you for this Workgroup?**

① Start presenting to display the poll results on this slide.

## List of Items from Previous Meetings

**Has interval data granularity been decided. ( 5 min, 15, hourly )** - The GB Regulation requirement is for intervals of one hour or less subject to any limitations of the energy provider's infrastructure. OEB Guidance - "collected by the energy provider and made available to account holders in the normal course of the energy provider's operations, excluding any data collected in respect of projects that are on a trial basis. Utilities already provide usage data in intervals less than one hour in the normal course of operations would be expected to provide that."

**Is the operating assumption regarding Utility vendors is that it could be anyone? Can each Utility make its own the decision on what data fields are used in the GB XML? Does that mean that each Utilities data set will need to be mapped by the end user in Ontario?** In the most general sense, XML element order does not matter, unless otherwise specified by the appropriate schema. The NAESB REQ.21 ESPI ver 3.3 standard requires the data to be in the order listed in the schema. The hope (through the ITWG) that there is a standardized mapped process for the XML.

**Does the Standard require only energy data?** Section REQ.21.2.5t defines the Energy Usage Information. Section REQ.21.2.67 defines the Retail Customer information and was added to the NAESB REQ.21 ESPI ver 3.3. In the OEB GB Task Force the OEB put data elements together for electricity and NG. OEB staff's view is that the "normal course" includes, at a minimum, all usage and account information that is included on a customer's bill or accessible through a customer's online account. See <https://www.oeb.ca/sites/default/files/OEB-Staff-Guidance-for-Implementation-of-Green-Button-20211101.pdf>

## List of Items from Previous Meetings

Is DMD different than existing Green Button download available to customers right now? [Legacy Ontario GB DMD was not certified to the Green Button Alliance, so most likely it will not be compliant.](#) [Reminder, The Ontario Government requires version 3.3 of the Standard to be used.](#)

How much time does utilities have before sending response to third party for the request of data? E.g. 1 customer Vs grouping multiple customers may have performance impact. [Per OEB guidance issued on November 1: new reporting requirements may be established to focus on data relevant to a distributor's ongoing Green Button operations, including customer take up and system performance.](#) [OEB is interested in hearing from stakeholders on what might be reported on if OEB were to establish new Reporting and Record Keeping Requirements related to user performance.](#)

What is involved in GBA certification testing? - [In FAQ](#)

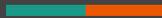
How do you get involved with the sub working groups? - [In FAQ](#)

To be in the ITWG should I have a purchased licence of the 3.3 version of the standard? - [In FAQ](#)

Other than the meter readings, what data fields will be electronically available - billing data, electrical demand, power factor? - [For ITWG](#)



# Future Discussions in the IWG



## Other Items for Future ITWG Discussions?

To help to define what electricity and natural distributors collect and make available in the normal course, create an inventory of electricity and distributor data that is on bills and other locations (e.g., MyAccount), what is available in the standard, and identify any gaps

# Independent Technical Working Group (ITWG) - Bill Focus

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- ITWG -Create an inventory of utility bills, what is available in standard & identify the gaps:
  - ITWG reports to IWG (once a week - 15 minutes) - first report due 2022-03-03...
    - Provide feedback / progress / needs.
  - Focus on mapping between Standard and data inventory (review differences).
  - Completed within 3 weeks (Monday meetings).
  - Co-Chairs - Ryan Harris ( Hydro One ), Don Coffin ( GBA)



# From previous Chat items - Passed on to ITWG

If a customer is on equal billing? How will it work? - Move to ITWG

Discuss Virtual Accounts (e.g., Alectra) - Move to ITWG

I think the challenge will be standardization of billing information.

- The GB standard UsageSummary resource provides the ability for a utility to breakdown by billing line the data they want to provide using a "free-form" description as part of the charge line.

Just wondering how vendors going to program systems to accommodate various "free-form" charge lines?

LCDs bill print line items are regulated, would it suffice to say at minimum we must send data per line item?

- An example of a UsageSummaryline entry which contains Description, amount, debit or credit:
  - a. Description entry could be Energy Distribution amount 25.00 debit, &
  - b. Description entry could be Payment amount 125.00 credit.

Individual rate elements are grouped on the bill print; assuming we provide the aggregate amounts the same mapping could be repurposed. Are we expected to provide a regulatory charge for each interval downloaded? i could be wrong but I think we only calculate those charges once a month during a billing cycle.. not each time the meter reports and interval.

## New User Experience (IUXWG) Sub - Working Group ( Mondays: next 3 weeks)

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- IUXWG -Review Customer Experience needs ( End User ) :
  - IUXWG reports to IWG (once a week - 15 minutes) - first report due 2022-03-03...
    - Provide feedback / progress / needs.
  - Focus on end user experience, e.g. Ease of Use , Ease of Control).
  - Completed within 3 weeks (Monday meetings).
  - Election of Co-Chairs (Now, in this meeting).

## Review / Discuss - User Experience - OEB Staff Guidance

OEB staff guidance, issued November 1, 2021 says:

Authorization should only occur after a customer has gone through an authentication process to verify that they are the account holder. Distributors should also consider alternate authentication approaches for customers without an online account with the distributor

OEB staff letter issued on November 1 states:

OEB staff also notes, In response to comments about alternate authorization pathways, that while such pathways may be beneficial from a customer or third-party perspective, the Green Button Regulation requires distributors to establish the authorization process for Green Button.” The reg. is silent on paper authorization. It does state that the distributor’s privacy policy must be provided in electronic format to the account holder. If the customer is not already engaged with the distributor online, and wishes to sign up to a Green Button App, we would not want that customer being prevented from doing so.

Observation: It is worth exploring with the GB IWG what we plan to do for such customers (that currently do not engage with the utility online or are in receipt of paper bills). If the customer is not already engaged with the distributor online , and wishes to sign up to a Green Button App, we can not prevent the customer from doing so.

## List of Items from Previous Meetings for - IUXWG

Can we support non-digital Authorizations. (e.g., paper) What are the costs?- **User Experience**

Can 3rd parties advise on what is required by them in their solutions/apps? - **User Experience**

Payment confirmations? Information regarding payment settings? Payment/e-billing settings? Would that be included? - **User Experience**

Bill print vendors may also need to be considered as in some cases, they do the consolidation of line item information for presentation on the bill.- **What Use Case would this cover? - User Experience**

Will the CMD process require customers to select the frequency with which data is shared (ie. monthly, daily, monthly etc) or will that be pre-established with the 3rd parties in the LDC/3rd party relationship? and further to that, is the duration of the CMD interaction an optional component for the end customer? Ie. customer authorizes the 3rd party interaction indefinitely or allowing the LDC solution to provide an option to customers of how long that relationship will remain in affect.

- (1) customers can select the "scope" of the data to be shared and (2) the third party has to option to specify certain minimum requirements, i.e. "We need 12 months of historic usage otherwise our product won't work" the "scope" of authorization is dynamic. More to be discussed in the IUXWG



## From previous Chat items - Passed to IUXWG

The customer is allowed to select in the Authorization portion of obtaining an access token for the Third Party depends on what the Third Party requires, what the Utility can provide, and what the customer wants to authorize. The Third Party must register with the Utility before being activated as a Third Party with access to the Utility platform. During that registration process the Third Party and the Utility agree on the type of data available. The customer should be allowed to determine what meters data the Third Party is able to access, as an example.

Agreed, that was my understanding as well. I just wanted to make sure folks weren't thinking the utility would present this menu of options to the customer, as opposed to a "do you agree with this selection as requested" kind of experience

Thank you for the comments regarding scope. I believe we have clarification surrounding the frequency however I still have question surrounding user experience from Utility side whereby the duration of the relationship is managed and furthermore, visible to the customer. LDCs will likely want a mechanism to keep customers apprised of 3rd parties that they have previously authorized.

What about Utility KPI's - see Q&A question # 14 - Question for IUXWG - Is there any reflection on User Experience?

Also see OEB Guidance Document See <https://www.oeb.ca/sites/default/files/OEB-Staff-Guidance-for-Implementation-of-Green-Button-20211101.pdf>

slido



**Name of a person who should  
lead the Technical subgroup  
("Lyndsey" / "Max" / "Pat")**

① Start presenting to display the poll results on this slide.

## New Independent Utility only (IUWG) Sub - Working Group ( next 4 weeks)

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- IUWG -Review Utility Centric issues :
  - IUWG reports to IWG (once a week - 15 minutes) - first report due 2022-03-03...
    - Provide feedback / progress / needs.
  - Focus on Utility issues and Needs.
  - No Affiliates or vendors allowed ( No Influencers, No cross affiliate discussion )
  - Completed within 4 weeks (Monday meetings).
  - Election of Co-Chairs (Now, in this meeting).

slido



**Name of a person who should  
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# Review / Discuss - Security and Privacy of Data - 45 min - Requirements by Law

## GB IWG members may benefit from being reminded of:

- The requirements re privacy in the reg. (e.g., there is the requirement to make distributors privacy policy available to customers when they authorize)
- OEB staff guidance
- When data is at the third-party it is the responsibility of the third-party.
- Privacy by design included in GB
- The existing obligations distributors have in relation to privacy does not change.



OEB Guidance Document See <https://www.oeb.ca/sites/default/files/OEB-Staff-Guidance-for-Implementation-of-Green-Button-20211101.pdf>

# Review / Discuss - Security and Privacy of Data - 45 min - Requirements by Law



## Question: *What about PIPEDA?*

### **Obtaining clear consent of an individual & using the information only for the consented purposes:**

- OAuth 2.0 "pop-up" to explain to customer what will be shared upon consent to that sharing of data with customer-designated entities.

### **Protecting the information from unauthorized access and use:**

- Authorization follows Authentication of the customer's validity. Verification of identity can be through existing utility methods.

### **Keeping the information up to date:**

- Unique identifiers for each interval of data allows data to be corrected later.

### **Destruction of information when no-longer need for original purposes:**

- OAuth 2.0 expirations and revocations can be used to ensure no further transmission.

### **Implementing accountability mechanisms for compliance:**

- all data travel encrypted and separated; all handshaking is encrypted; valid certificates are used for entity identity.

## Review / Discuss - Requirements by Law / Regulation / Policy



**Summary of privacy laws in Canada** - [https://www.priv.gc.ca/en/privacy-topics/privacy-laws-in-canada/02\\_05\\_d\\_15/](https://www.priv.gc.ca/en/privacy-topics/privacy-laws-in-canada/02_05_d_15/)

**The Personal Information Protection and Electronic Documents Act (PIPEDA)**

<https://www.priv.gc.ca/en/privacy-topics/privacy-laws-in-canada/the-personal-information-protection-and-electronic-documents-act-pipeda/>

**Freedom of Information & Protection of Privacy Act:** <https://www.ontario.ca/laws/statute/90f31>

**Ontario Government– I&IT Standards (GO-ITS):** <https://www.ontario.ca/page/information-technology-standards>

Simpler, Faster, Better Services Act, 2019 <https://www.ontario.ca/laws/statute/19s07>

Digital Service Standard <https://www.ontario.ca/page/digital-service-standard>

Digital Service Design Playbook: <https://www.ontario.ca/page/service-design-playbook>

Archives and Record Keeping Act, 2008: <https://www.ontario.ca/laws/statute/06a34>

Integrated Accessibility Standards Regulation (191/11):

<https://www.ontario.ca/laws/regulation/r11191>



# FAQ's

1

## Do I need to Buy the Standard?

- If you are an Ontario Electric or Natural Gas Utility or a vendor using the standard. YES. Also see [NAESB Copyright](#)

2

## Where Can I find the Ontario Regulation?

- [O. Reg. 633/21: ENERGY DATA](#)

3

## Can we do Bulk Registration?

- For a single utility YES GB -related. Across utilities NO not part of the Standard or Regulation

4

## Where can I find OEB staff guidance related to Green Button implementation in Ontario?

- [OEB Green Button Implementation](#)



# FAQ's

5

**When Do the Utilities have to have their systems Operational and Certified by GBA?**

- Regulation states November 1, 2023

6

**Does the ESPI (GB) standard handle Line Losses?**

- Yes, there are fields for Line Losses.

7

**Who needs to get Certified by the Green Button Alliance?**

- All Ontario Utilities within the Regulation. Completed by November 1, 2023

8

**How many options are there for Reading Quality (for the metered intervals)?**

- There are 19 options and more can be proposed, if needed.



# FAQ's

9

## Is historical data required for former customers of a Utility?

- Utilities are not required to pass data on to previous customers even if they move within the Utility.

10

## How Many times do I as a Utility need to certify

- If they are separate platforms or tested separately you will have to pay separately (same time and using the same engine)

11

## What is the cost of GBA Certification?

- DMD Cert+Test is US\$3,000.  
Cert+Test is US\$3,200. The cost of DMD+CMD Cert+Cert+Test is US\$3,700.

12

## What consumption data will be made available by Utilities through GB: e.g. unadjusted (metered) or adjusted (after application of Total Loss factor)

- The Standard does hold these data sets. Each Utility is required to determine what data is available



# FAQ's

1  
3

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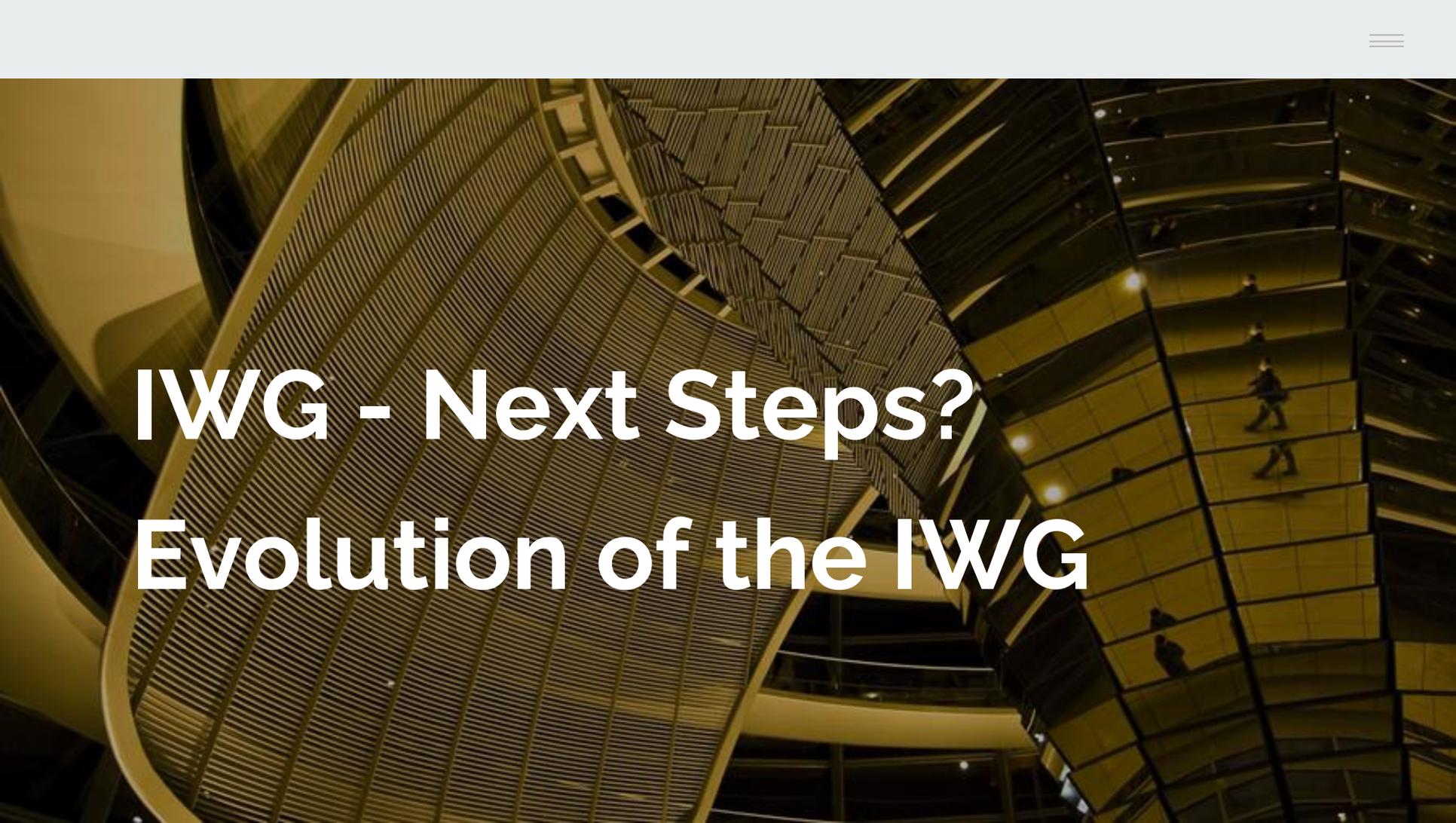
**What is involved in GBA certification testing?**

- Look on the GBA website <https://www.greenbuttonalliance.org/testing> for more information. It is part of Ontario's regulation requirement.

1  
6

**Do I need the NAESB v3.3 ESPI Standard to take part in the IWG or sub working Groups**

- No but you may need to purchase the Standard as required by regulation, law and or copyright requirements. The IWG is not the NAESB. We need to conform with the same rules as others (as required by laws and or Regulations)



# IWG - Next Steps? Evolution of the IWG



**IWG**

**Thank you for your participation**

**To reach out to the Co-Chairs - Email us**

