Notes

* Clemens gave a presentation
  + Testbed-19
    - MeteoFrance and global broker
    - Taking observations
    - Taking bufr file, converting to 1 observation per observed property
    - AsyncAPI representation of the observations/channels
      * ogcapi/t19.ldproxy.ner/wis20/collections/wisobservations/items
    - Showed specific channel for every combination of channel and observed property
  + For this sprint
    - Create, Update, Delete (in terms of a new feature)
    - Whenever a feature is created, it will update the channels available
    - So a new collection will be referenced within asyncapi as a channel.
    - Secured using OpenID connect
    - API definition
      * Security schemes listed
      * OpenIDConnect
      * Token endpoint
        + Client credential via POST
        + Copy the token
        + Showed the token in JWT.io
        + Takes the token and posts a feature.
        + POST request to the items endpoint that created a new feature.
        + Feature 13 shown within the OGC API Features endpoint.
        + As this happened, 1 new feature with 1 new message was shown.
        + For the EDR Spec:

Says id, pubtime, operation

Clemens prepended with $ so that there would not be a conflict

EDR says that id should be UUID which may not be desirable.

Clemens thinks we should prefer the feature ID which is a fair point.

* + - * + Showed deleting the feature

Message came through with delete operation

* + Discussion regarding Pub/Sub Spec
    - Clemens/Tom discussed the value of the link relation:
      * Mainly this discussion: <https://github.com/opengeospatial/ogcapi-environmental-data-retrieval/issues/451>
    - Should we standardize the channel naming approach
      * If we take on the OGC API structure verbatim, we can tie channels directly to the OGC API endpoints
    - Should we prepend the channel?
      * /pubsub/collection/<collectionId>
    - Need engagement from each OGC API SWG on the proper way to notify on changes to resources
    - PubSub SWG
      * Engagement from
        + Connected Systems
        + Features
        + Processes
        + Records
        + EDR
      * This will help determine what goes in the OGC API Pub/Sub specification.
      * Conformance Class
        + Must use asyncapi definition with a link relation
  + Channel Identifier Issue - could be 2 separate issues
    - <https://github.com/opengeospatial/ogcapi-environmental-data-retrieval/issues/452>
    - Conformance class for channel structure to follow?
      * 1 environment could follow one structure
      * 1 environment could follow another structure
    - OGC API endpoint does provide value
    - Is it worth is to **prepend the channel structure such as**:
      * ogcapi/t19.ldproxy.net/wis20/collections/surface\_obs/items
    - Is it worth it to add **filtering in the channel**:
      * ogcapi/t19.ldproxy.net/wis20/collections/surface\_obs/filters/3hour\_pressure\_change\_gt\_4hPA
    - CQL filtering within the channel?
      * collections/{collectionId}/filters/{+filters} to receive messages about features (new or updated) that match a CQL2 filter expression. Multiple filter expressions will be combined with AND.
    - Basic functionality with preset filtering
    - Advanced functionality (Part 2) where:
      * Peter Vretranos brings up:
        + Could have an API where authorized users can create new channels that then appear within the AsyncAPI definition.
    - Each API needs to define what the basic channels will be and how to add additional channels.
  + Potential Conformance Classes
    - Channel Structure
      * SWG’s should determine what is mandated, or best practice
      * Determine what is common to all Standards would be in the Pub/Sub specification
        + Such as AsyncAPI definition
    - Prefixed Channels? - Question to be answered
      * Value in adding the ogcapi as top level and the host.
      * This is attempting to make channels unique in a multiple broker environment
    - Advanced Filtering