



PCCW Global[®]

Surveillance data exchange on CRV

**Fifth Meeting of the Surveillance
Implementation Coordination Group**

Sept 2020

HKT Here To Serve a **PCCW** Group member

CRV - the future of APAC & MID Aeronautical Communications Infrastructure



Scope and Potential members of Common Regional Virtual Private Network (CRV)

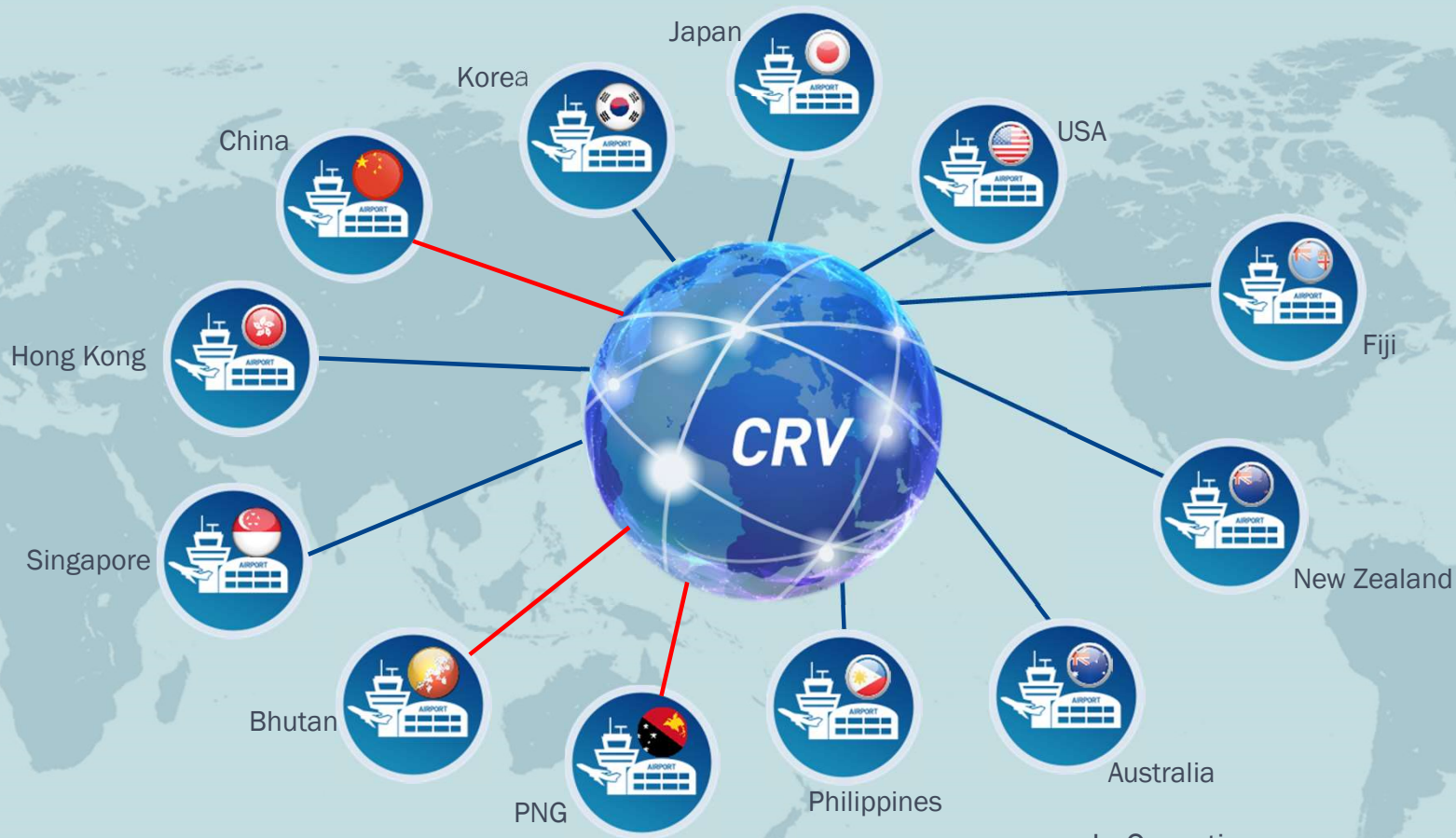


ANSP – 60+ (APAC & MID)



ATM Community





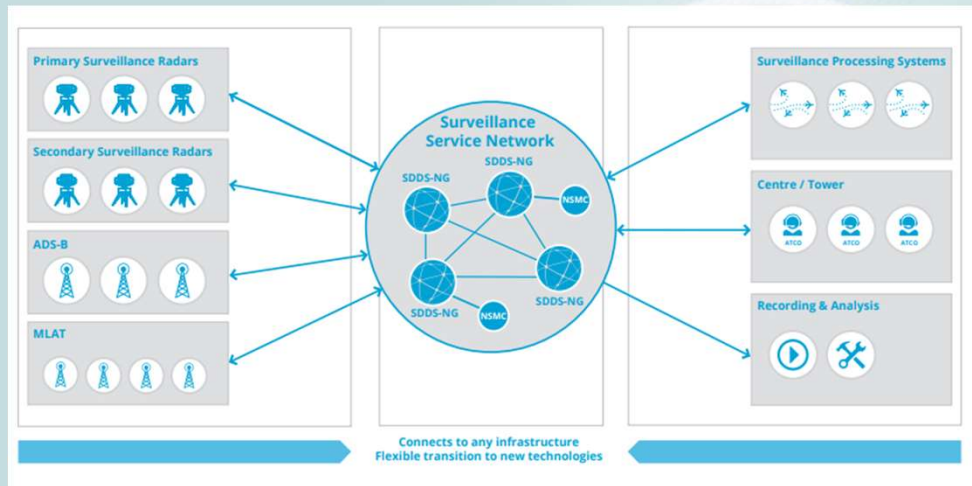
- In Operation

- In provisioning





PCCWG SWIM Market Place



PCCWG is working on a hosted platform over CRV which will include centralised hosting facility, market place and network distribution capability, such that CRV users can make use of it to share and distribute surveillance data (ADS-B or other radar data)

Instances

ID	Name	Version	Compliant	Comment	Instance M	Keywords	Status	Organization
1	PCCW TAC to IVROOM Converter	1.0	X NO	A service that converts textual message to IVROOM format	un-misc-swim-service-conv-1-0-0-001	TAC, IVROOM, converter, SWIM	provisional	
7	JANSP1 ADSB LIVE FEED	1.0	X NO	A service by JANSP1 that provides a live ADSB feed for the JANSP1 FB.	un-misc-swim-service-ansp1-1-0-0-001	SWIM, Airspace, UTM	provisional	
8	ANSP2 IVROOM LIVE FEED	1.0	X NO	Live IVROOM feed provided by ANSP2	un-misc-swim-service-ansp2-1-0-0-001	SWIM, IVROOM	provisional	
9	FR24 LIVE FEED	1.0	X NO	A service provided by FR24 for live flight surveillance data	un-misc-swim-service-fr24-1-0-0-001	SWIM, Flight, UTM	provisional	
10	ATM Data Publishing	1.0	X NO	An ATM service for data publishing	un-misc-swim-service-atm-1-0-0-001	SWIM, Data Publishing, ATM	provisional	

PCCWG SWIM Market Place



Standards & Policies can be formulated by ICAO SWIM TF.

PCCWG supports the daily implementation and management



Consumer

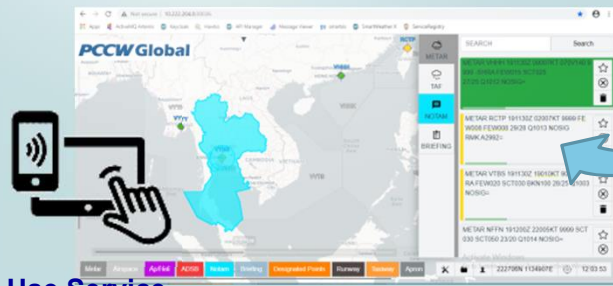
Discover Service

Consuming Service



Provide Service

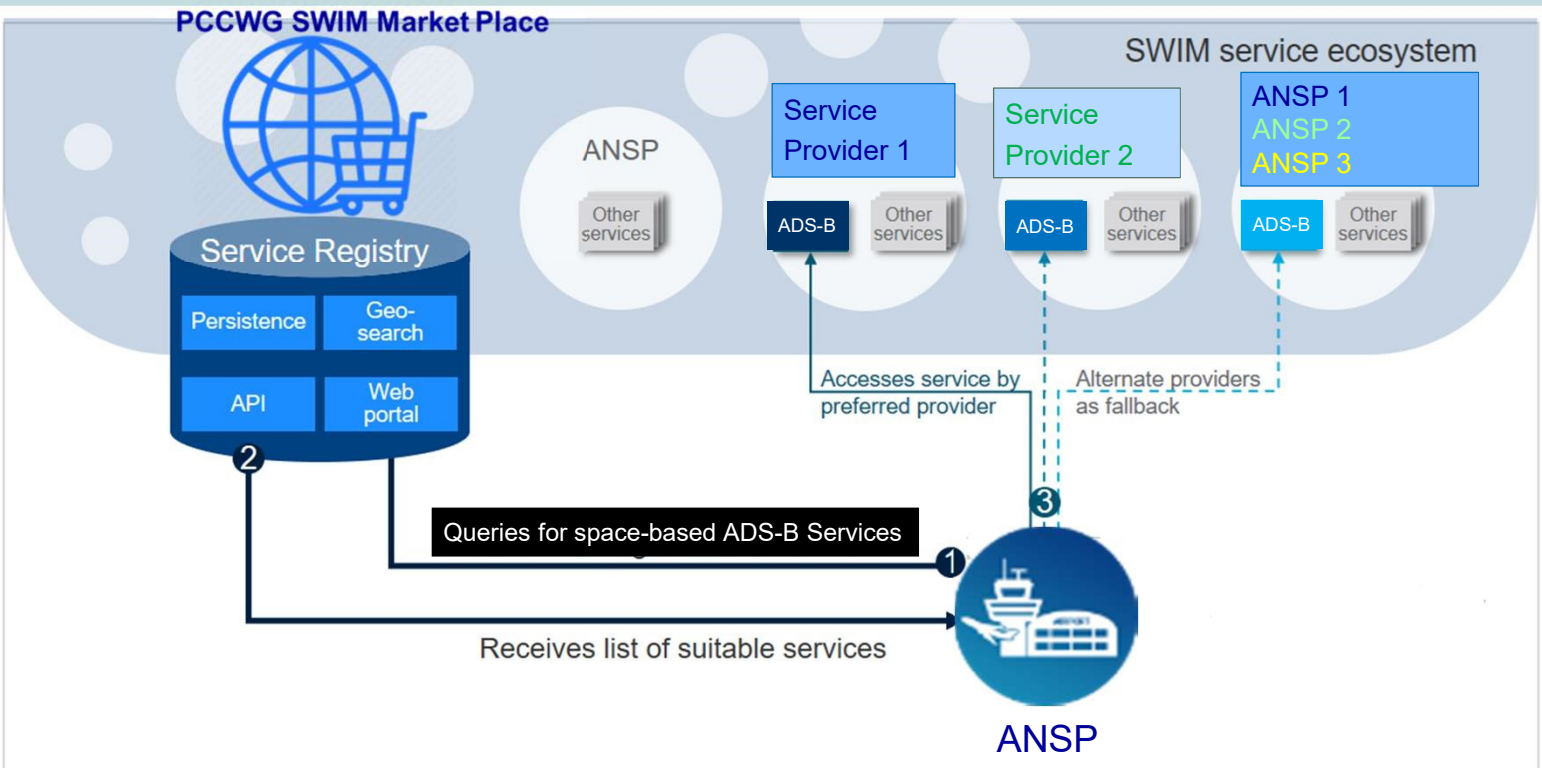
ANSPs / Data, Service Providers – Services can be hosted in PCCWG Environment or connect thru API



Use Service

Market Place

Critical component of SWIM services ecosystem



Market Place

Instances

+ Create a new Instance

ID	Name	Version	Compliant	Comment
1	PCCW TAC to IWXXM Converter	1.0	✗ NO	A service that converts textual message to IWXXM format
7	ANSP1 ADSB LIVE FEED	1.0	✗ NO	A service by ANSP1 that provides a live ADSB feed for the ANSP1 FIR
8	ANSP2 IWXXM LIVE FEED	1.0	✗ NO	Live IWXXM feed provided by ANSP2
9	FR24 LIVE FEED	1.0	✗ NO	A service provided by FR24 for live flight surveillance data
10	ATM Data Publishing	1.0	✗ NO	An ATM service for data publishing

Instance 7

Name	ANSP1 ADSB LIVE FEED
Version	1.0
Compliant	✗ NO
Comment	A service by ANSP1 that provides a live ADSB feed for the ANSP1 FIR
Geometry	
Instance Id	urn:mrx:swim:service:instance:ansp1-adsb-feed
Keywords	SWIM, Airspace, UTM
Status	provisional
Organization Id	
Unlocode	
Endpoint Uri	http://10.249.24.25:14002/ansp1-adsb-feed
Endpoint Type	
Instance As Xml	ANSP1 ADSB LIVE FEED
Instance As Doc	
Implemented Specific...	
Design	

CRV users can subscribe 3rd party provider's data feed, also can upload data or send live feed to the platform for further sharing and distribution to all subscribed CRV users.

PCCW Global



3 mins demo link : <https://pccw.sharefile.com/d-s8a948e578c646809>

METAR

TAF

NOTAM

BRIEFING

FIR: ALL FILTERS Airport: ALL FILTERS

SEARCH Search Clear

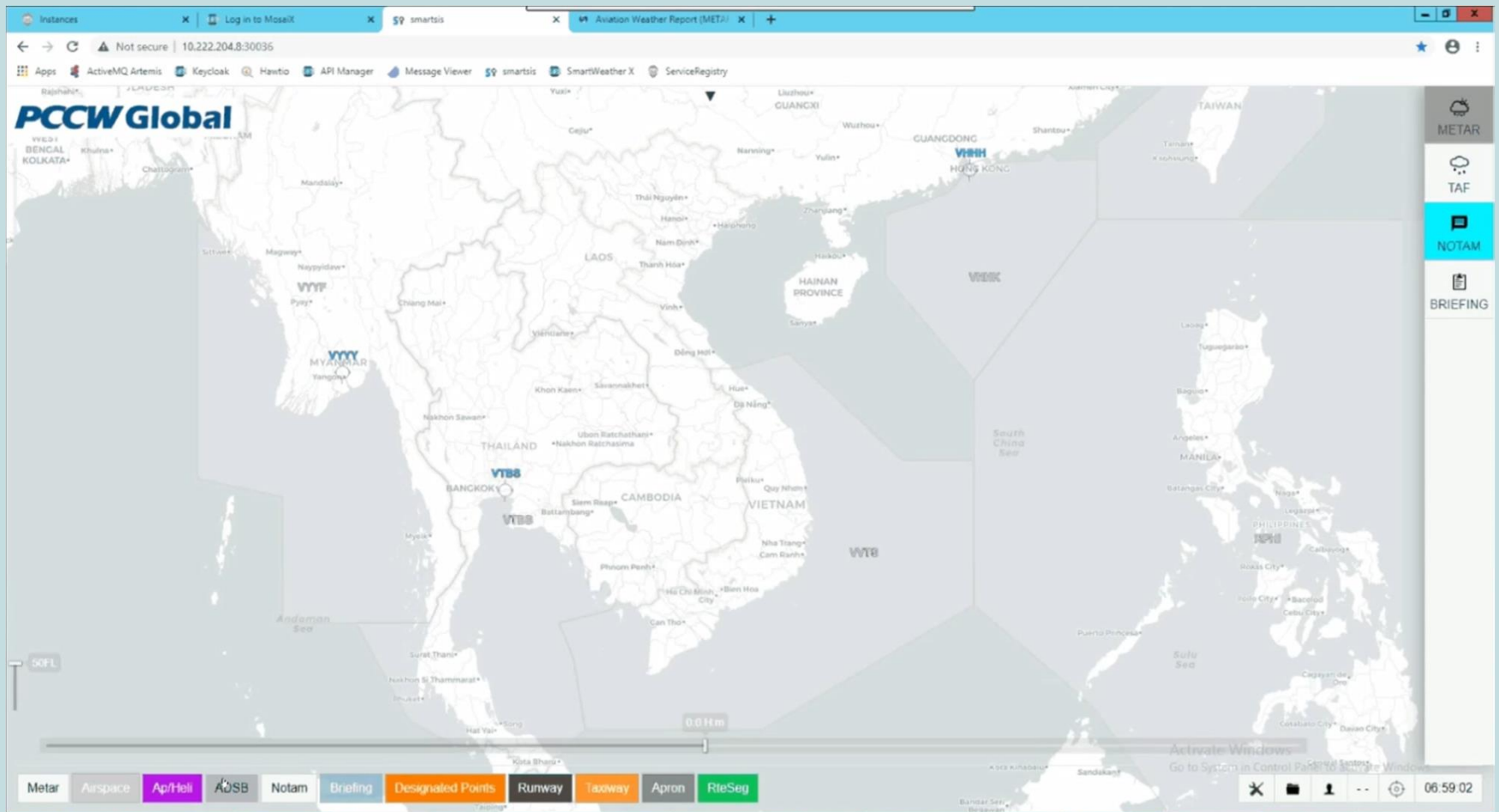
(A2107/20 NOTAMR A1308/20
Q) VTBB/QFDAS/I/M/A/000/999/1341N10045E005
A) VTBS B) 2009100319 C) 2012080600
E) VISUAL DOCKING GUIDANCE SYSTEM (VDGS) U/S DUE TO MAINT AS FLW:
ACFT STAND NR 101-111
ACFT STAND NR 116
ACFT STAND NR 301-308
ACFT STAND NR 506-525
RMK/ACFT HAVE TO FLW MARSHALLING SIGNALS STRICTLY)

(A1776/20 NOTAMR A1070/20
Q) VTBB/QCACF/IV/B/AE/000/999/1341N10045E080
A) VTBS B) 2008070435 C) 2011080950
E) A/G FAC ARR FREQ 133.6MHZ OPR FRE Q CHANGED TO 121.1MHZ)

(A1761/20 NOTAMR A1268/20
Q) VTBB/QOBCE/IV/M/AE/000/999/1341N10045E001
A) VTBS B) 2008060725 C) 2011070200
E) OBST MOBILE CRANE MAX HGT 12M (39.37FT) AGL OR 13.70M (45.62FT)
AMSL RADIUS 10M OPR WI AREA BOUNDED BY THE FLW POINT:
134128.18N1004459.97E-
134128.02N1004500.88E-
134126.46N1004459.65E-
134128.18N1004459.07E

03:02:38

Highlights of the Video



Market Place

Instances

+ Create a new Instance

ID	Name	Version	Compliant	Comment
1	PCCW TAC to IWXXM Converter	1.0	✗ NO	A service t IWXXM fc
7	ANSP1 ADSB LIVE FEED	1.0	✗ NO	A service t feed for th
8	ANSP2 IWXXM LIVE FEED	1.0	✗ NO	Live IWXX
9	FR24 LIVE FEED	1.0	✗ NO	A service t surveillanc
10	ATM Data Publishing	1.0	✗ NO	An ATM se

EXAMPLE

Instance 9

Name FR24 LIVE FEED

Version 1.0

Compliant ✗ NO

Comment Demo data by FR24 LIVE FEED for APAC flights

Geometry

Instance Id urn:mrx:swim:service:instance:ansp1-adsb-feed

Keywords SWIM, Airspace, UTM

Status provisional

Organization Id

Unlocode

Endpoint Uri http://10.249.24.25:14002/ansp1-adsb-feed

Endpoint Type

Instance As Xml FR24 LIVE FEED

Instance As Doc

Implemented Specific...

Desian

Display the surveillance data in PCCW User interface

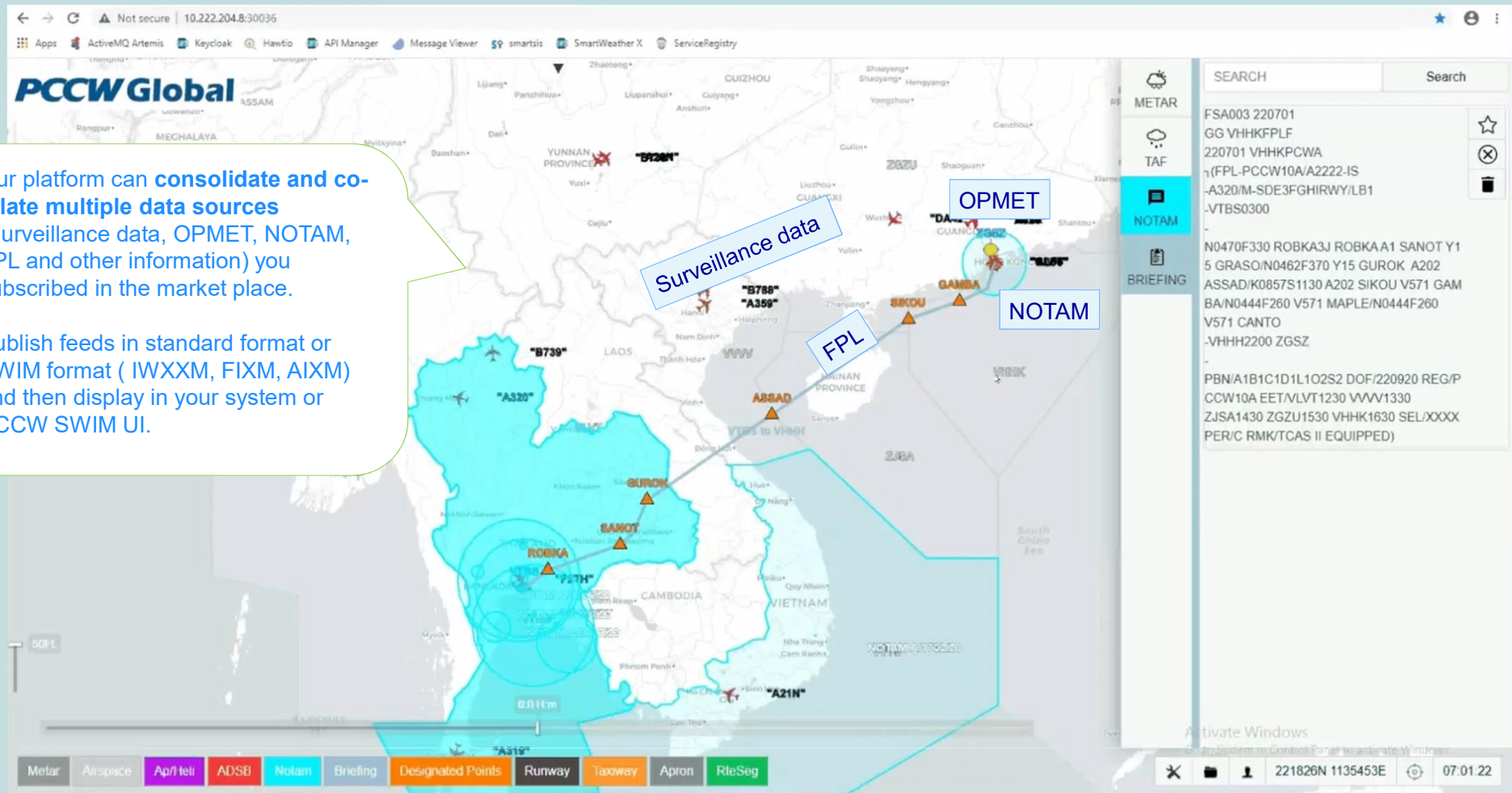
The screenshot displays the PCCW Global User Interface. The main area is a map of Southeast Asia with various aircraft icons and alphanumeric codes (e.g., "A333", "B737", "A359", "B788", "A320", "A21N", "A306", "A319", "A321", "A320XLR", "A321XLR", "A320neo", "A321neo", "A320neoXLR", "A321neoXLR", "A320neoXLR", "A321neoXLR") representing surveillance data. A blue callout box labeled "Surveillance data" points to one of these icons. On the right, a sidebar shows a table of instances and a detailed view for the "FR24 LIVE FEED" instance.

ID	Name IT	Version	Compliant	Comment
1	PCCW TAC to FR24 Converter	1.0	X NO	A service 1 to FR24
7	ANSP1 ADSB LIVE FEED	1.0	X NO	A service 1 feed to th
8	ANSP2 FR24 LIVE FEED	1.0	X NO	Live FR24
10	FR24 LIVE FEED	1.0	X NO	A service 1 surveillance
11	ATM Data Publishing	1.0	X NO	An ATM se

Instance 9

- Name: FR24 LIVE FEED
- Version: 1.0
- Compliant: X NO
- Comment: Demo data by FR24 LIVE FEED for APAC flights
- Geometry:
- Instance Id: urn:mim:avim:service:instance:ansp1-adsb-feed
- Keywords: SWIM, Airspace, UTM
- Status: provisional
- Organization Id:
- Unicode:
- Endpoint Uri: http://10.249.24.25:14002/ansp1-adsb-feed
- Endpoint Type:
- Instance As Ref: FR24 LIVE FEED
- Instance As Doc:
- Implemented Specific...

- 1) Our platform can **consolidate and co-relate multiple data sources** (Surveillance data, OPMET, NOTAM, FPL and other information) you subscribed in the market place.
- 2) Publish feeds in standard format or SWIM format (IWXXM, FIXM, AIXM) and then display in your system or PCCW SWIM UI.



For more information about **CRV and SWIM**

Please visit below link:

<https://www.youtube.com/watch?v=iPd941AV0pQ&feature=youtu.be>



Thank You