Country (Bangladesh)
Status of the information systems & operations at Bangladesh Meteorological Department(BMD)

Md. Abdul Matin

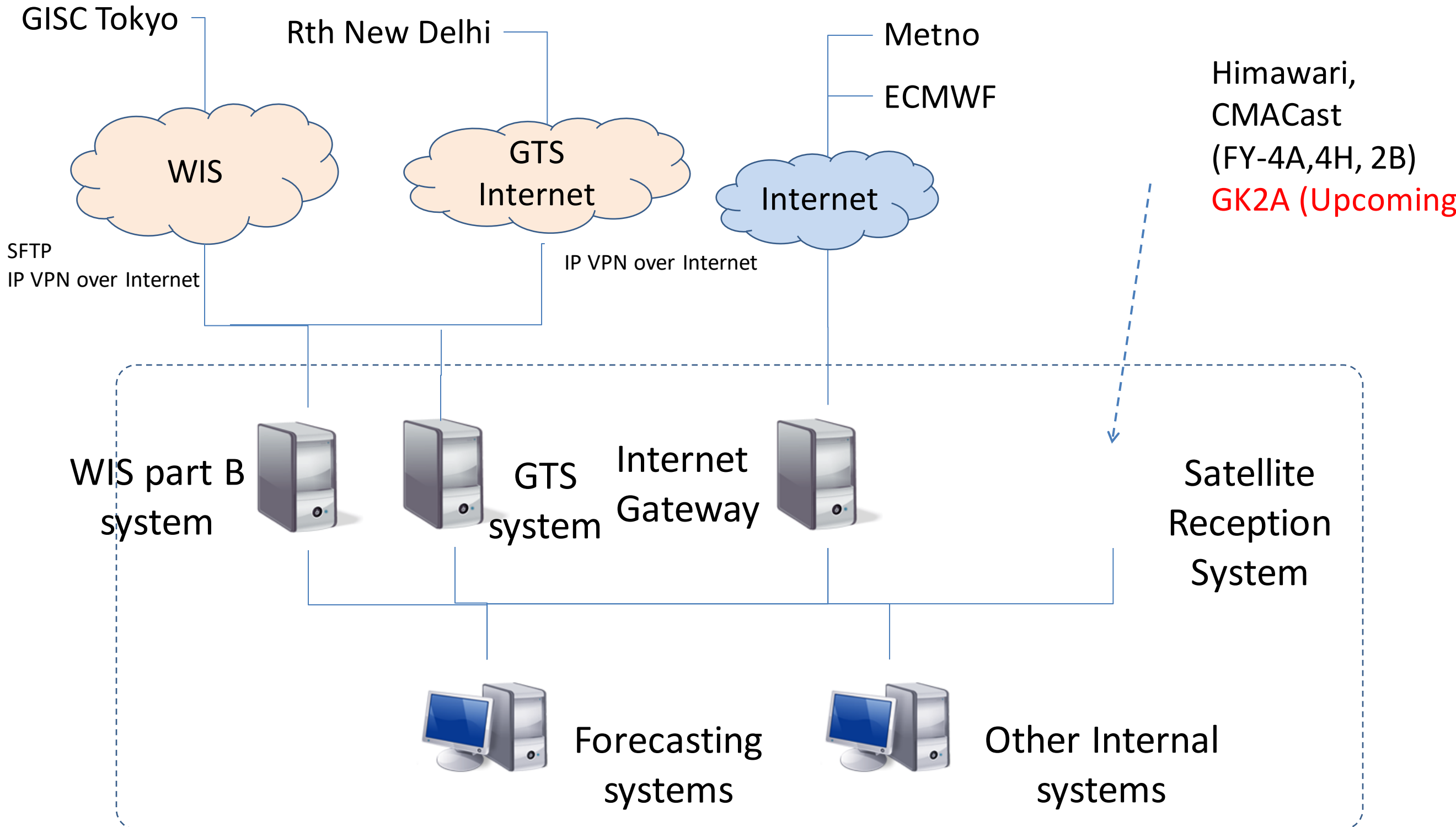JMA WIS Workshop
17-19 January 2022, on-line (MS-Teams)

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c. Data provision to GTS/WIS

1. System/network configuration

GISC Tokyo

Rth New Delhi

Metno

ECMWF

Himawari,
CMACast
(FY-4A,4H, 2B)
GK2A (Upcoming

WIS

GTS
Internet

Internet

SFTP
IP VPN over Internet

IP VPN over Internet

WIS part B
system

GTS
system

Internet
Gateway

Satellite
Reception
System

Forecasting
systems

Other Internal
systems

2. Internet tools

- Tools for day-to-day operation
  - JMA SATAID
    - https://www.wis-jma.go.jp/cms/sataid/
  - ECMWF forecast charts and data
    - https://www.ecmwf.int/en/forecasts
  - JAXA GSMaP
    - https://sharaku.eorc.jaxa.jp/GSMaP/
  - Metno Graphical Forecast
    - https://Wr.no/
  - Earth Wind Map
    - https://earth.nullschool.net/

3. Utilize Internet Services

- Providing information to public
  - BMD web on Cloud
    - Disaster mitigation via BMD web
    - https://www.bmd.gov.bd

4. Plans, Issues etc.

- Changes/progress in last three years
  - GTS system was replaced in June 2019
  - Link was established via IP VPN over Internet with Rth New Delhi
  - Re established SFTP links via the Internet in Nov. 2020
    - Tokyo

ANNEX

- Following items (after this slide) will not be presented by participants, however you can discuss as a QA
  - Annex-a International connections
  - Annex-b Data Reception from GTS/WIS
  - Annex-c Data Provision to GTS/WIS

Annex-a International connections

Centre	Protocol	Line	Data
Tokyo	WMO Socket	GTS, MPLS	JMA Model (GRIB), SYNOP, SHIP, TEMP, METAR …
New Delhi	WMO FTP	GTS, Internet	Tropical Cyclone advisory, SYNOP, TEMP and other observational data
Metno		Internet	Meteosat satellite image
ECMWF	HTTP	Internet	Global Model (GRIB)
JMA	-	Satellite Receiver	Satellite image
CMA	…	Satellite Receiver	Satellite image

Annex-b Data Reception from GTS/WIS

- SYNOP, SHIP, CLIMAT, TEMP, PILOT
- Aviation (METAR, TAF, SIGMET, AMDAR)
- Marine (BUOY)
- GEO satellites (AMV, CSR, ASR)
- Forecast, Analysis
- Warning
- Tropical cyclone advisories
- Volcanic ash advisories
- etc.

Annex-c Data Provision to GTS/WIS

- SYNOP (TAC and BUFR)
- SHIP (TAC and/or BUFR)
- CLIMAT (TAC and BUFR)
- TEMP, PILOT (TAC and BUFR)
- PILOT (TAC and BUFR)
- RADAR Message