# Infrastructure Committee

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## Overview of the Working Group

- Forum of professionals:
  - Network/station operators
  - Data Centre/GNSS-IT professionals
  - Ex-officio members (chairs and coordinators from other IGS Working Groups)
- Develop policies, standards, guidelines and recommendations
- Maintain and improve the GNSS data and information systems upon which IGS product quality and responsiveness rely
- Ensure the overall effectiveness of the Service



### Recommendations

[R1] Following input from the community at the 2022 workshop, develop a roadmap to enhance the IGS tracking network to meet the shifting user needs.

Network diversity, Outreach and Engagement, Capacity building

[R2] Advocate for the importance of information security across the IGS to improve the resilience of the infrastructure and increase trust and confidence in our data and products.

Basic risk assessment and questionnaire on security, Case studies



### Recommendations

[R3] Explore modern standards, data storage and access methodologies to improve the FAIRness of the IGS data and metadata.

Cloud-based storage formats, APIs, Implementing GeodesyML across networks

[R4] Develop a proposal to investigate a higher tier of data center (global archive) which would set mandatory requirements such as quality control, data synchronization and some form of service level agreement with the IGS.

[R5] Actively engage with all working groups to support them in accessing the data and products needed to succeed in their objectives.



## Progress since IGS 2022 Virtual Workshop (June 2022)

[R1] Develop a roadmap for the future of the IGS network:

- Network White Paper (presented at GB62)
- Revise IGS CORS guidelines
- Capacity Building (Wiki, Knowledge Base, Outreach & Engagement)

#### [R3] GeodesyML:

- Officially moved standard to IGS repository
- Working on next release to improve FAIRness of metadata (information about license, networks, data centers)
- 2 independent reference implementations currently in validation phase (IGS CB, GFZ)



## Progress since IGS 2022 Virtual Workshop (June 2022)

[R5] Actively collaborated with other WGs and DCs for a smooth transition to IGS20

[R5] Updated "Guidelines for Long Product Filenames in the IGS"

[R5] Worked on transition to RINEX 4.00, official move scheduled for Q1/2023

[R5] Worked with MGEX WG on merge of products to official product portfolio, scheduled for Q1/2023



### **Future Work**

[R2] Promote importance of Information Security

[R3] Explore modern data storage/access methods:

- Feasibility analysis to use tileDB as storage format
- Build APIs for custom file generation based on tileDB

[R4] Global Archive:

- Concept development and requirements gathering: next 4-6 months
- Design phase
- Call for participation (at least 2 DCs necessary)
- Implementation/trial phase



# IGS INTERNATIONAL GNSS SERVICE

# Thank You!

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