



# GOSC CURRENT STATUS AND PROPOSALS

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# Summary

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GOSC is a platform for diversified applications. It is user driven. It should have governance and ISO Standards. It should be flexible enough to accommodate new processing powers in the form of computation and AI. Current issues such as COVID-19, Digitalization , SDG and mega scientific applications should adopt GOSC. GOSC should be Sustainable



# Governance and ISO Standards

## ISSUES

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- GOVERNANCE
- GUIDE LINES
- FRAMEWORKS

GOSC HAS BEEN PRESENTED AT ITU AS A PLATFORM FOR DISASTER RISK, SMART CITY, PRECISION MEDICINE (GENOMICS)

A request has been made to address the issues of GOSC by ITU-D Study Group 2 Question 5/2

## ITU

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[https://www.itu.int/net4/ITU-D/CDS/contributions/sg\\_v2/cnt\\_rpt\\_stg\\_cont\\_details.asp?mtg=10758&lg=1&prd=2018](https://www.itu.int/net4/ITU-D/CDS/contributions/sg_v2/cnt_rpt_stg_cont_details.asp?mtg=10758&lg=1&prd=2018)

[https://www.itu.int/net4/ITU-D/CDS/contributions/sg\\_v2/cnt\\_stg\\_annex\\_view.asp?aid=55236](https://www.itu.int/net4/ITU-D/CDS/contributions/sg_v2/cnt_stg_annex_view.asp?aid=55236)

# GOSC Scientific Applications

Scientific applications include astronomy, astrophysics, environment, climate, health , etc

With respect to Africa:EU AND AU MOU

IST-Africa can be used to get EU finances for African Union related projects for Scientific applications or for Disaster Risk Applications

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# GOSC Corporate Applications

Digitalization has now become the new norm both in corporations and governments. AU AGENDA

<https://u.pcloud.link/publink/show?code=XZDIWakZOyWvS8FtDHFerQbhPK8Y9kU3ldoV>

AIIB ICT REPORT

[https://www.aiib.org/en/policies-strategies/operational-policies/digital-infrastructure-strategy/.content/\\_download/Full-DISA-Report\\_final-with-Appendix-2020-01-10.pdf](https://www.aiib.org/en/policies-strategies/operational-policies/digital-infrastructure-strategy/.content/_download/Full-DISA-Report_final-with-Appendix-2020-01-10.pdf)

# GOSC SHOULD BE BASED ON DECADAL SCIENCE SUSTAINABILITY ISSUES

Science is based on six dimensions

- 3 dimensions of space
- 2 dimensions of numbers (Complex numbers)
- 1 dimension of time (Static time)

# PROPOSAL

Science to be based on n-dimensions

- n-dimensions of space
- n-dimensions of numbers (Geometric Algebra numbers)
- n-dimension of time (Vector time)



# CODATA AI and Machine Learning DECADAL Programme

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The processing power of GOSC should embrace innovations in AI and Machine Learning

Similar to the proposed n-dimensions as the bases of Science, AI and Machine Learning Can also be based on n-dimensions of space, numbers and time

We propose a new CODATA Task group called:

**COMPUTATION AND AI TASK GROUP**

# COVID-19 and Other Disaster Risks

CODATA DISASTER RISK:

GOSC can be used as a new tool  
within the CODATA Task Group

<https://codata.org/initiatives/task-groups/fair-data-for-disaster-risk-research/>

RDA COVID TASK GROUP:

<https://www.rd-alliance.org/groups/rda-covid19>

[https://www.rd-alliance.org/system/files/documents/H2020\\_Guidelines\\_COVID19\\_EC.pdf#page7](https://www.rd-alliance.org/system/files/documents/H2020_Guidelines_COVID19_EC.pdf#page7)

# Funding and Sustainability

Africa: To implement GOSC in Africa, AASCTC, our center in Khartoum has submitted a project to Asian Infrastructure Investment Bank (AIIB). This will allow for the formation of African Cloud called Africa Arab Science and Technology Cloud (AAScTCloud).

AASCTC also has private financiers to implement GOSC at Exascale level

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