



World Meteorological Organization

Weather • Climate • Water

# Satellite data user needs in the Indian Ocean region

CGMS-43 Plenary Item D.4

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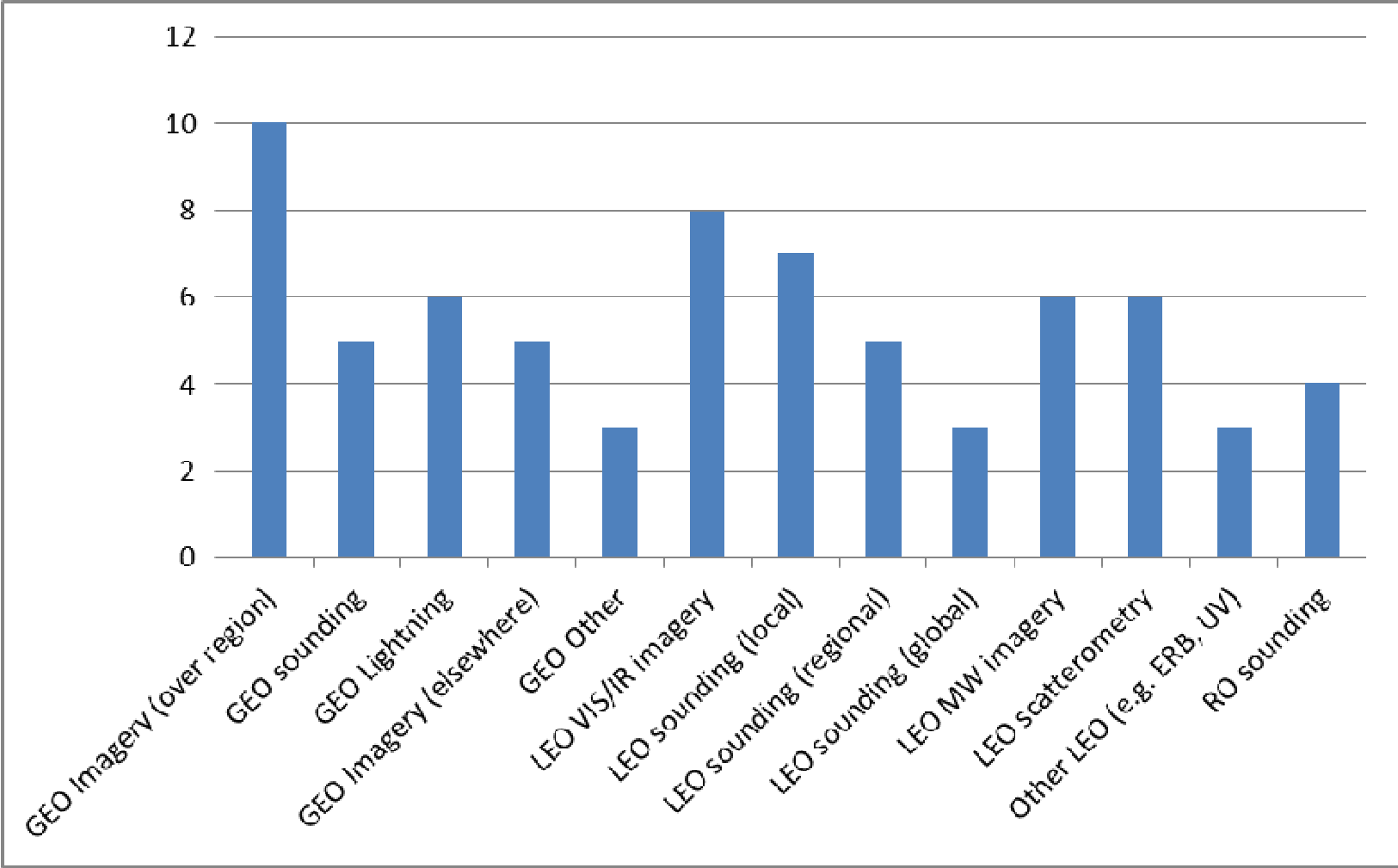
*WMO*

# Satellite Data User Needs in Indian Ocean region

- To inform the discussion on the CGMS roadmap for Indian Ocean data coverage
- To respond to WG III Action 42.01  
“WMO to initiate a dialogue with Indian Ocean satellite operators and clarify which data are essential in the sense of Resolution 40, in view of the meteorological requirements in the region.”
- WMO user survey in Feb/Mar 2015
  - RA-I DEG, RA II WIGOS Coordination Group, RA V TT-SU, AuBOM, BMKG Indonesia, IMD India, Oman and Russian VLab CoE, RSMC-TC La Réunion
- Asked about users’ satellite data needs (L1 and L2)
- Distinction between
  - baseline requirements (for regular operations), and
  - additional requirements (in case of severe event or emergency)
- Responses from 11 countries



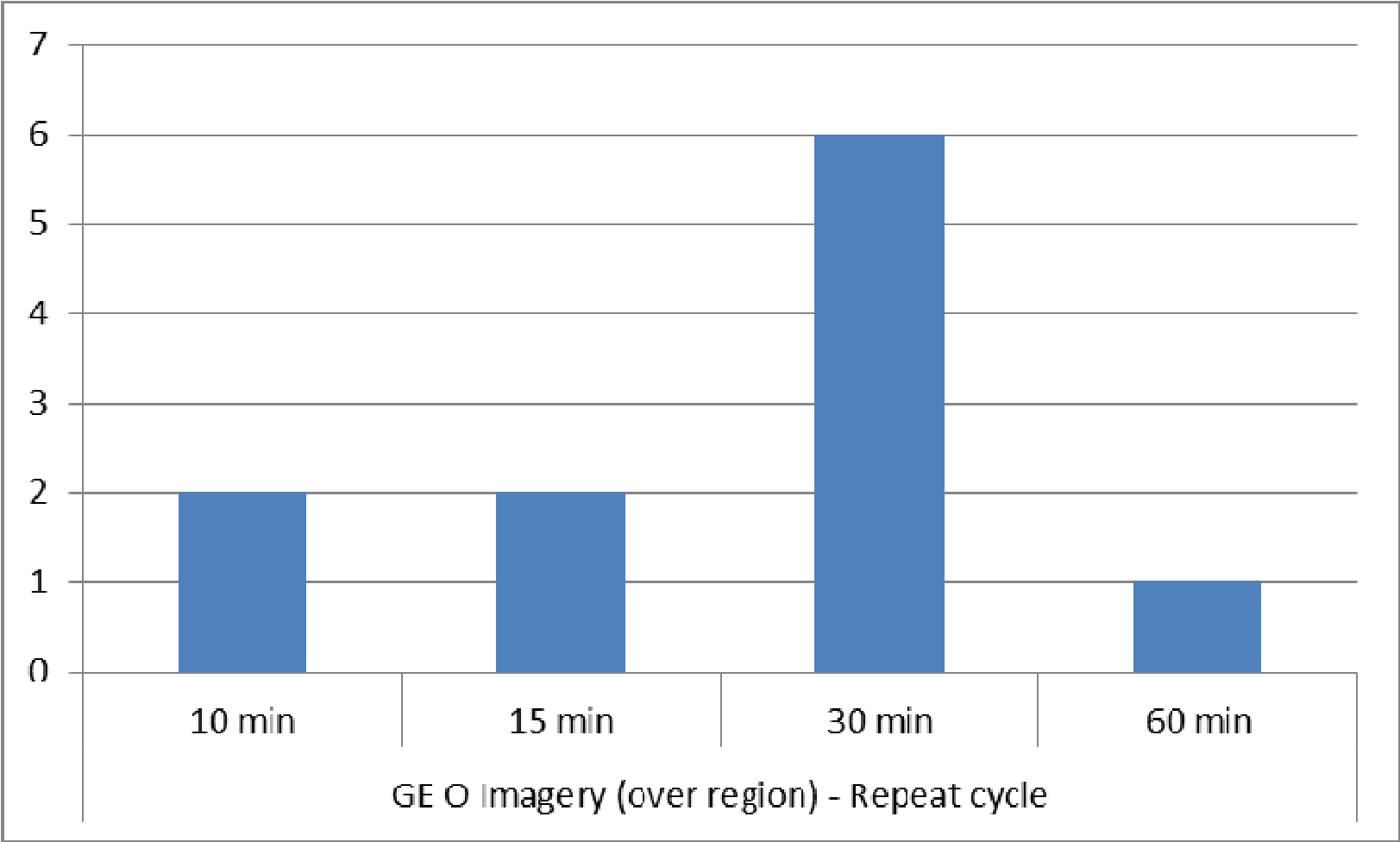
# Baseline requirements – L1



(Number of responses)



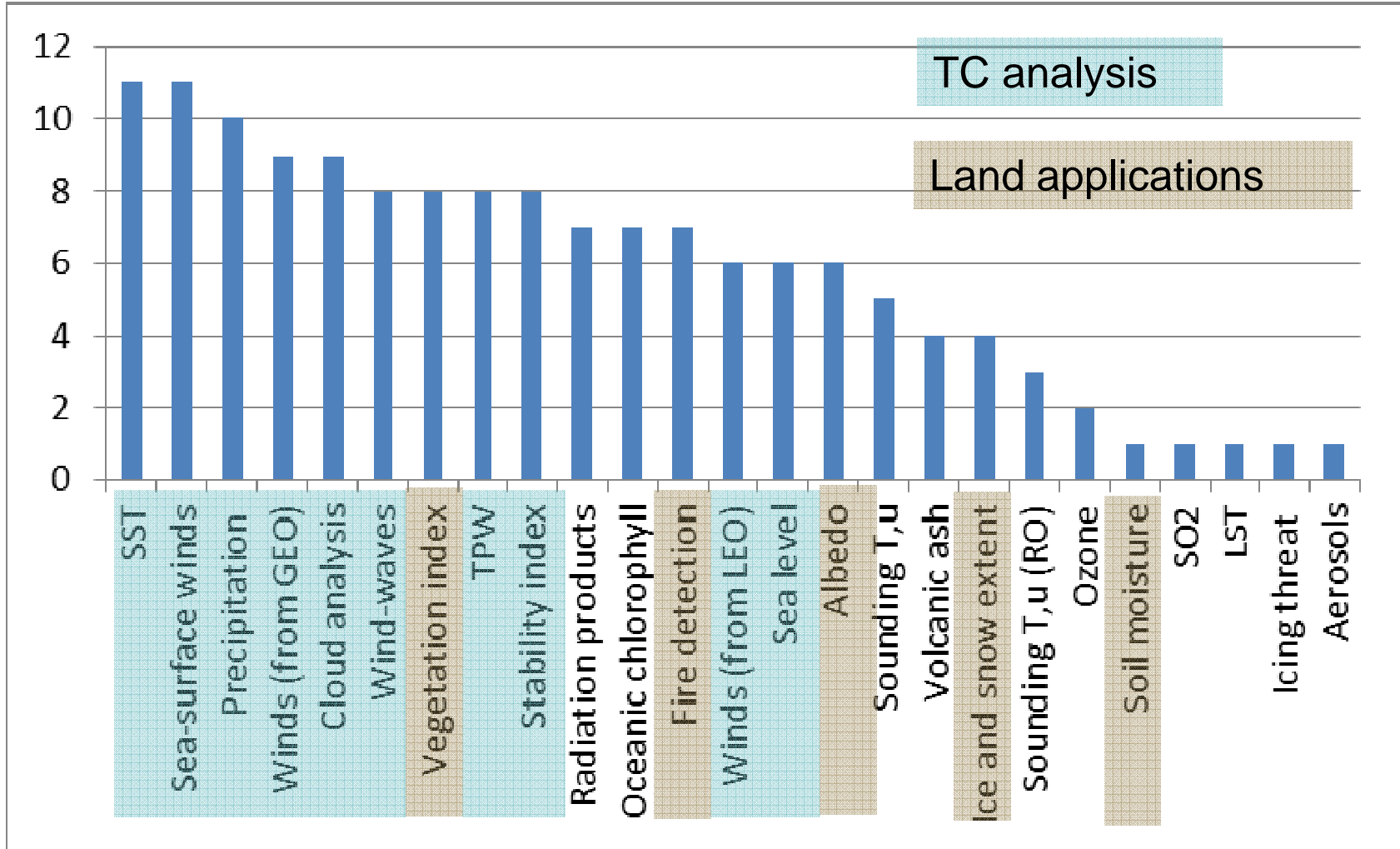
# Baseline requirements – L1



(Number of responses)



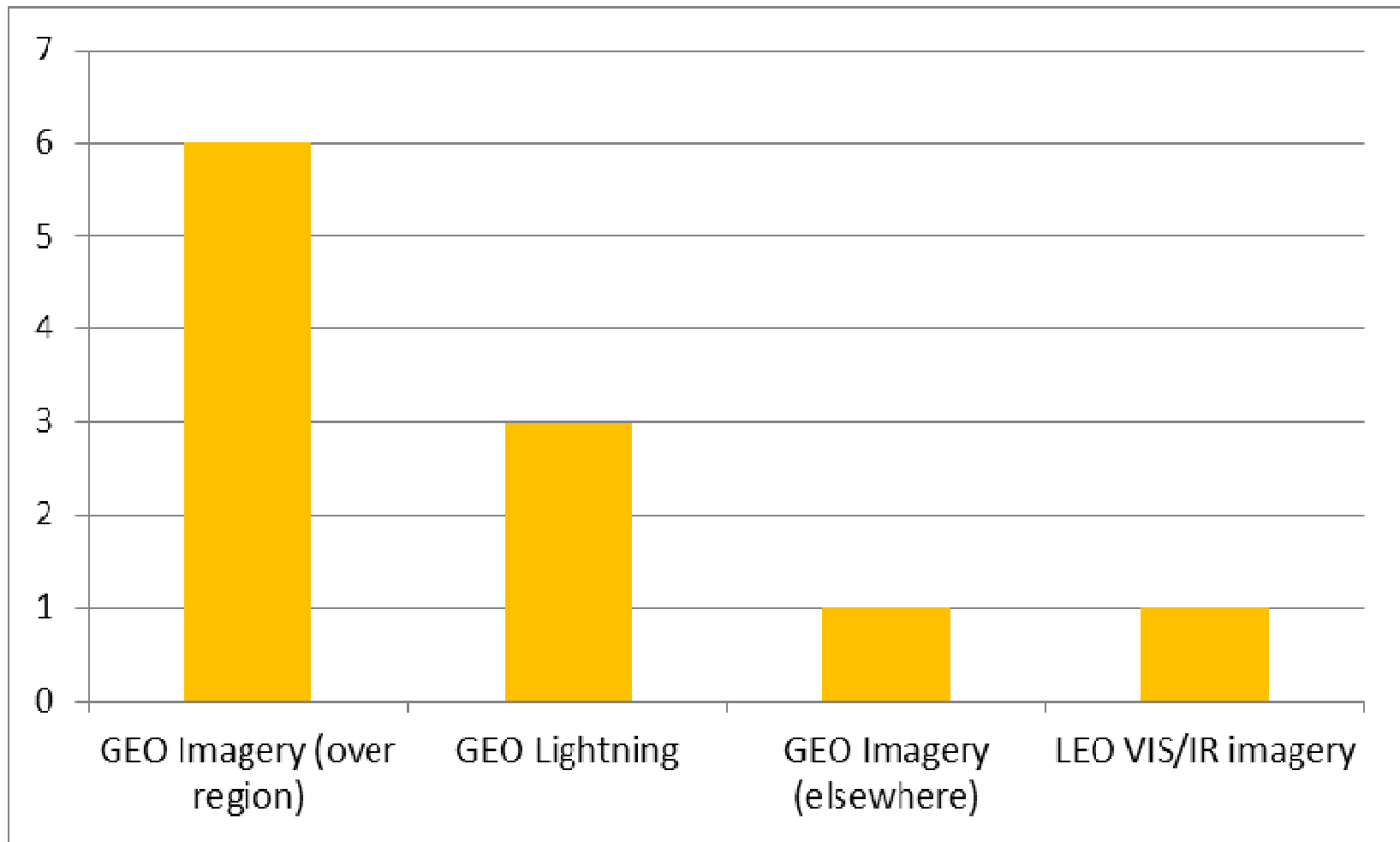
# Baseline requirements – L2



(Number of responses)



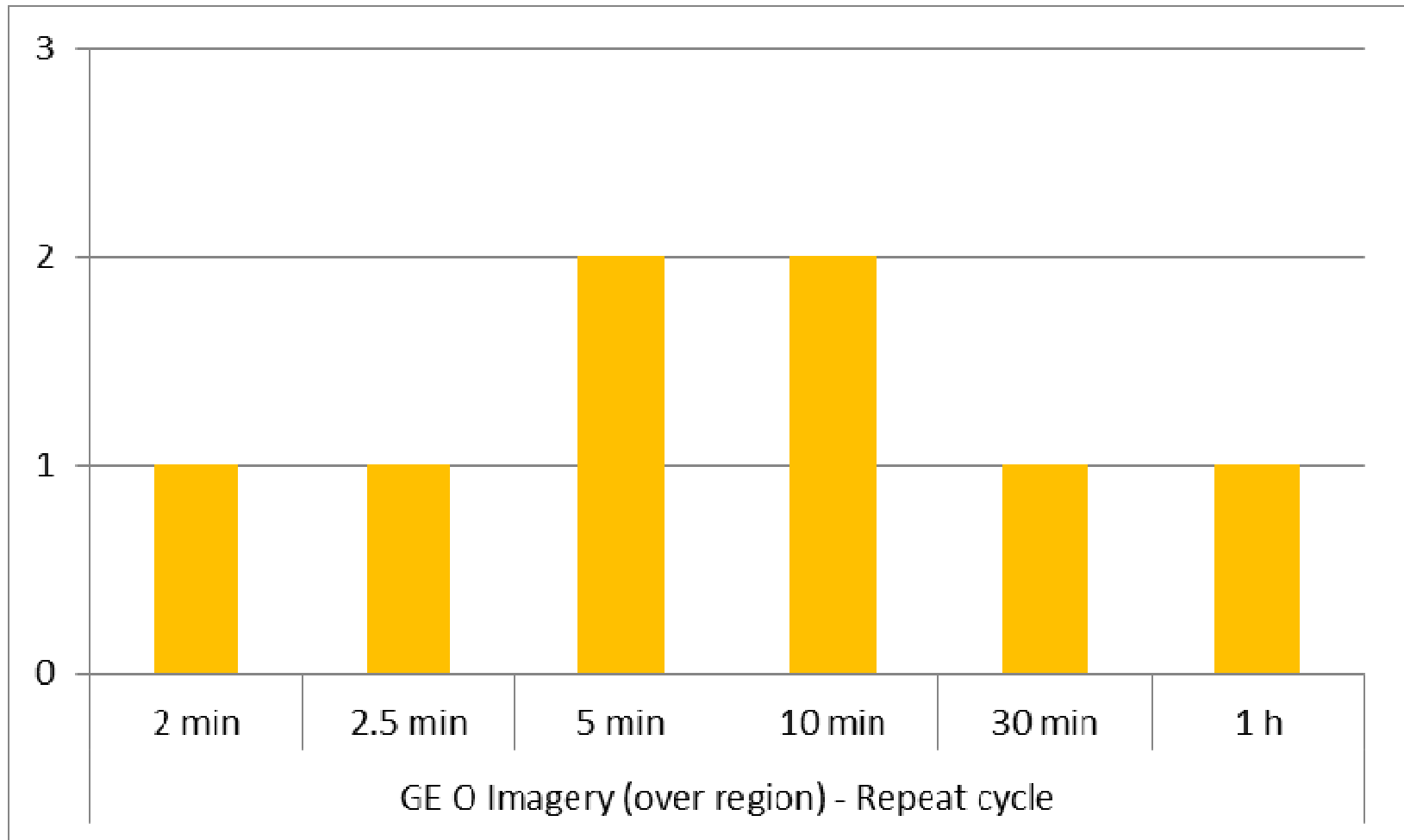
# Additional requirements – L1



(Number of responses)



# Additional requirements – L1



(Number of responses)



# Conclusions

- Requirements dominated by the need to monitor and forecast tropical cyclones
- Requirements not limited to the need for observing the Indian Ocean but also address land applications, such as fire detection
- Some redundancy in satellite coverage of the region is needed (GEO (also from other areas), LEO)
- According to the majority of responses, the required baseline repeat cycle for GEO imagery over the region is 30 minutes
- GEO has higher importance in due to its higher repeat cycle
- Most users require additional GEO imagery in case of emergencies or severe events, with the majority requiring rapid-scan imagery every 10 minutes or less
- Several users expressed a requirement for GEO lightning products
- N.B.: Survey results preliminary, not yet validated and consolidated by the broad user community in the Indian Ocean region





# Proposed Action/Recommendation

- CGMS members to take into account the user requirements identified in the WMO survey when discussing continuous satellite coverage over the Indian Ocean region.
- WMO to validate and consolidate the preliminary user requirements for satellite data in the Indian Ocean region with major user groups and stakeholders in the region, and to report on results to CGMS-44.

