

A futuristic space landscape. In the background, a large, textured planet is partially visible against a dark sky with a bright light source on the right. A smaller planet or moon is visible in the upper left. In the foreground, a vast, icy, and hilly terrain is shown. Two small, dark figures are standing on the flat ground in the distance. The overall color palette is dominated by blues, greys, and whites, with a bright cyan light source on the right.

# Long Term Sustainability

A Topic For A New Space Era



**A. Overview of LTS of Space Activities**

**B. Scope of LTS of Space Activities**

**C. Time Framework for LTS**

**D. Concerns and Worries**

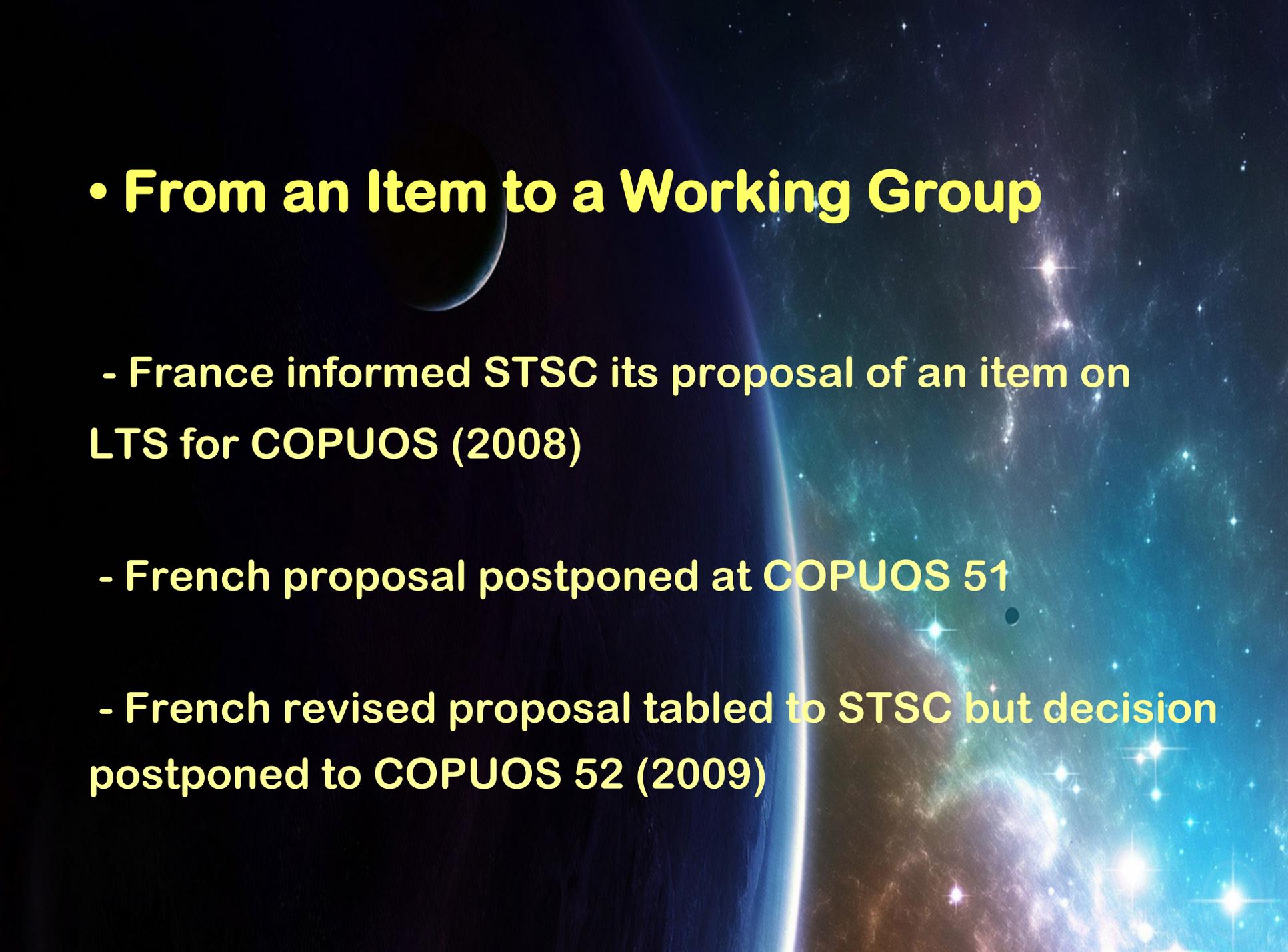
**E. Are We Ready for the Topic?**

# Overview of LTS of Space Activities



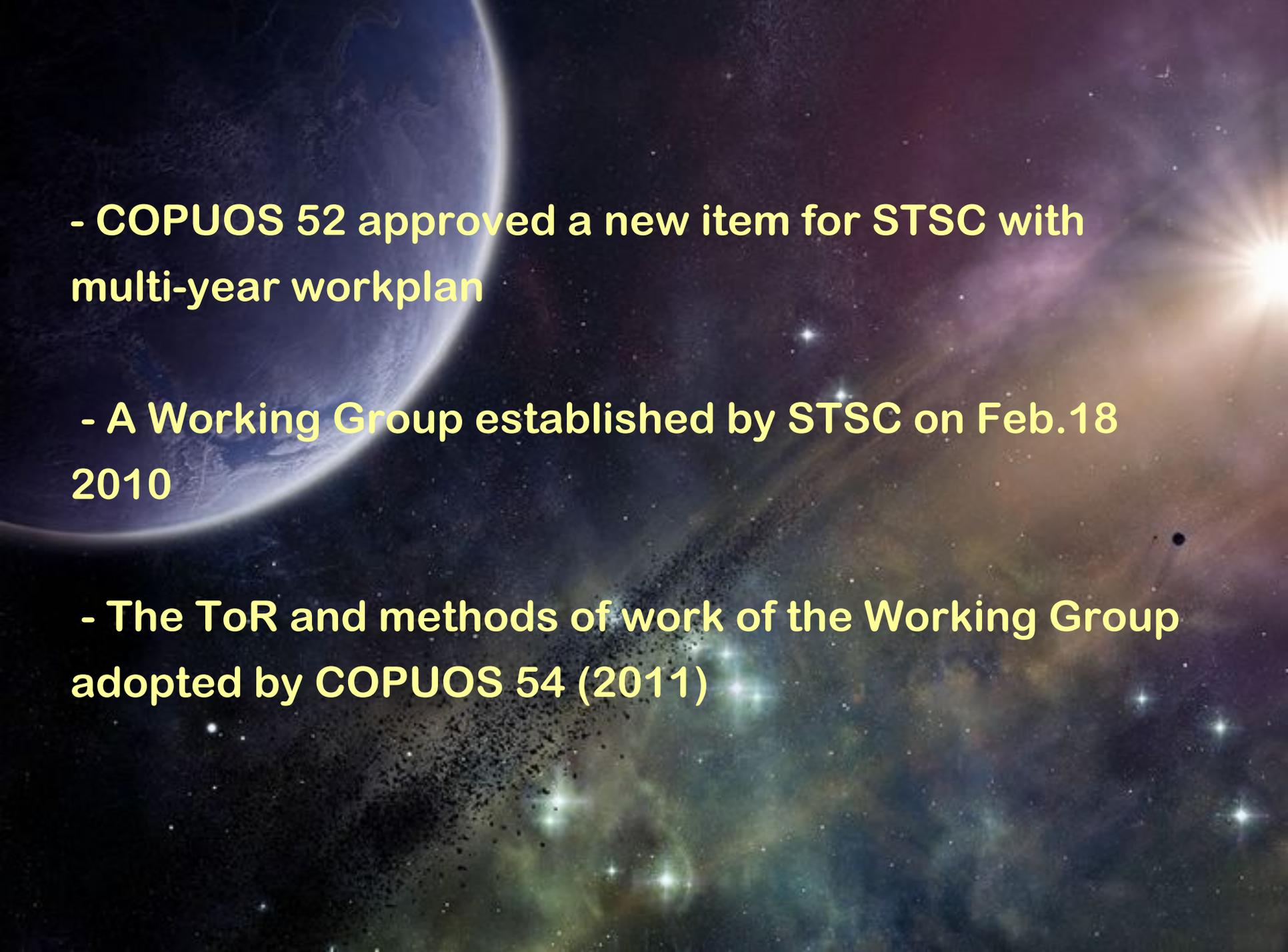
- **Origin**

- Brachet Paper on " Future role and activities of COPUOS"
- Space Community's contribution on awareness raising (IADC, IAA, IAASS)
- Informal Working Meetings (2008 - 2009, Paris - Glasgow - Vienna)
- Preliminary Reflections (A/AC.105/C.1/2010/CRP.3)

The background of the slide is a composite image of space. On the left, the blue and white horizon of Earth curves into the frame. The rest of the background is a deep black space filled with stars and a vibrant, multi-colored nebula or galaxy structure in shades of blue, green, and purple.

## • From an Item to a Working Group

- France informed STSC its proposal of an item on LTS for COPUOS (2008)
- French proposal postponed at COPUOS 51
- French revised proposal tabled to STSC but decision postponed to COPUOS 52 (2009)

A background image of space featuring a large, curved portion of the Earth on the left side, showing blue oceans and white clouds. The rest of the background is a dark, starry field with a bright sun or star on the right side, creating a lens flare effect. The overall color palette is dominated by blues, purples, and blacks.

**- COPUOS 52 approved a new item for STSC with multi-year workplan**

**- A Working Group established by STSC on Feb.18 2010**

**- The ToR and methods of work of the Working Group adopted by COPUOS 54 (2011)**



- **From A Working Group to Work**

- **Working Group meetings**

- **Expert groups:**

- A (Sustainable Space Utilization supporting Sustainable Development on Earth)**

- B (Space Debris, Space Operations and Tools to support Collaborative Space Situational Awareness)**



## **C (Space Weather)**

## **D (Regulatory Regimes and Guidance for Actors In the Space Arena)**

- Road Mapping at the IAC in Cape Town (2011)**
- Meetings of Expert Groups B,C,D**
- Method of work for Expert Group B**
- Work Plan for Expert Group C**
- Working on the presentation for workshop 2012**

# **Scope of LTS of Space Activities**

- **Scientific and Technical Issues**

- **Space Debris**

- **Space Operation**

- **Space Weather**





- **Management and Policy Issues**

- **Space Situational Awareness**

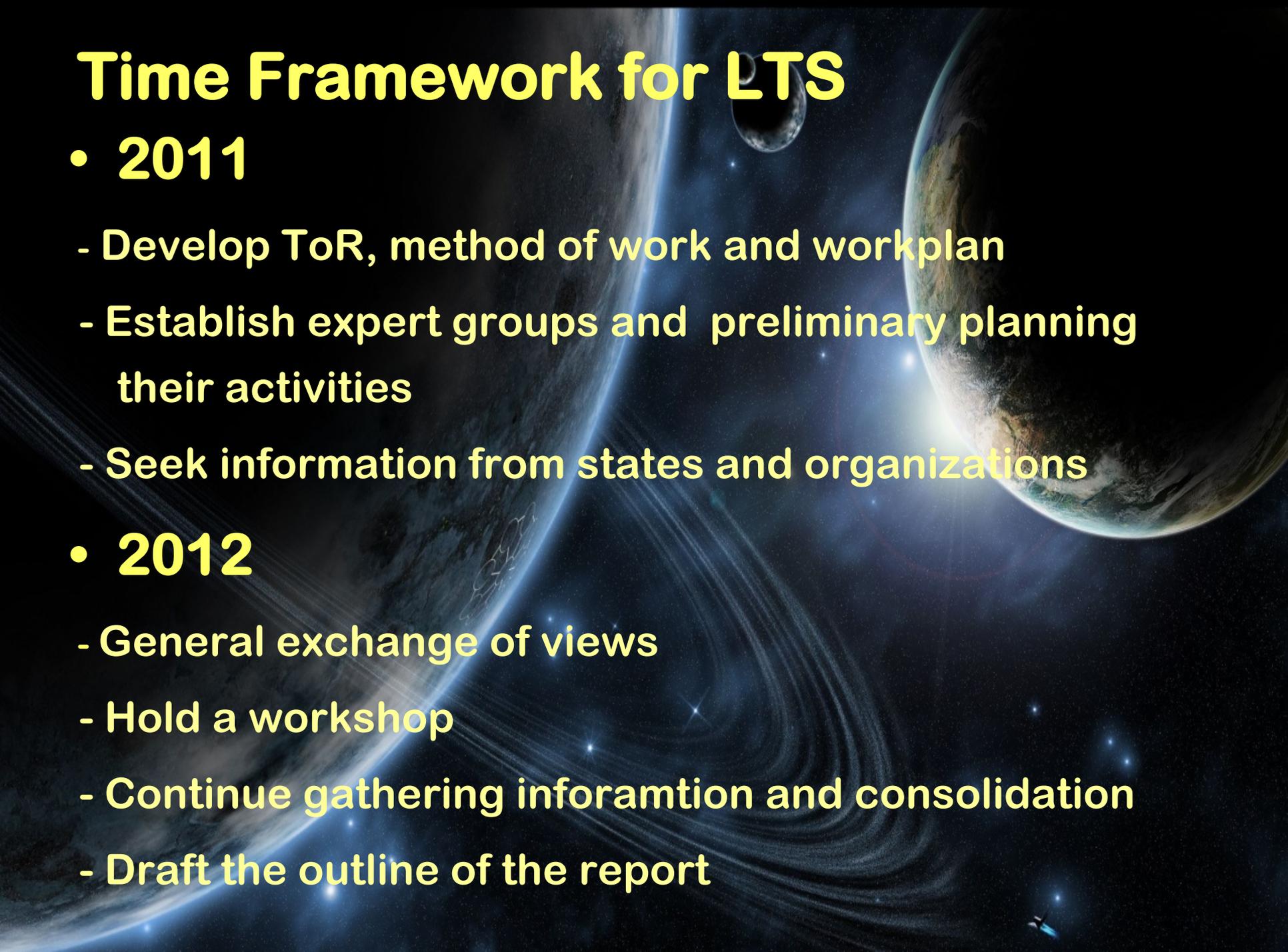
- **Space and Sustainable Development**

- **Legal or normative Issues**

- **Regulatory Regimes**

- **Guidance for Space Actors**

# Time Framework for LTS

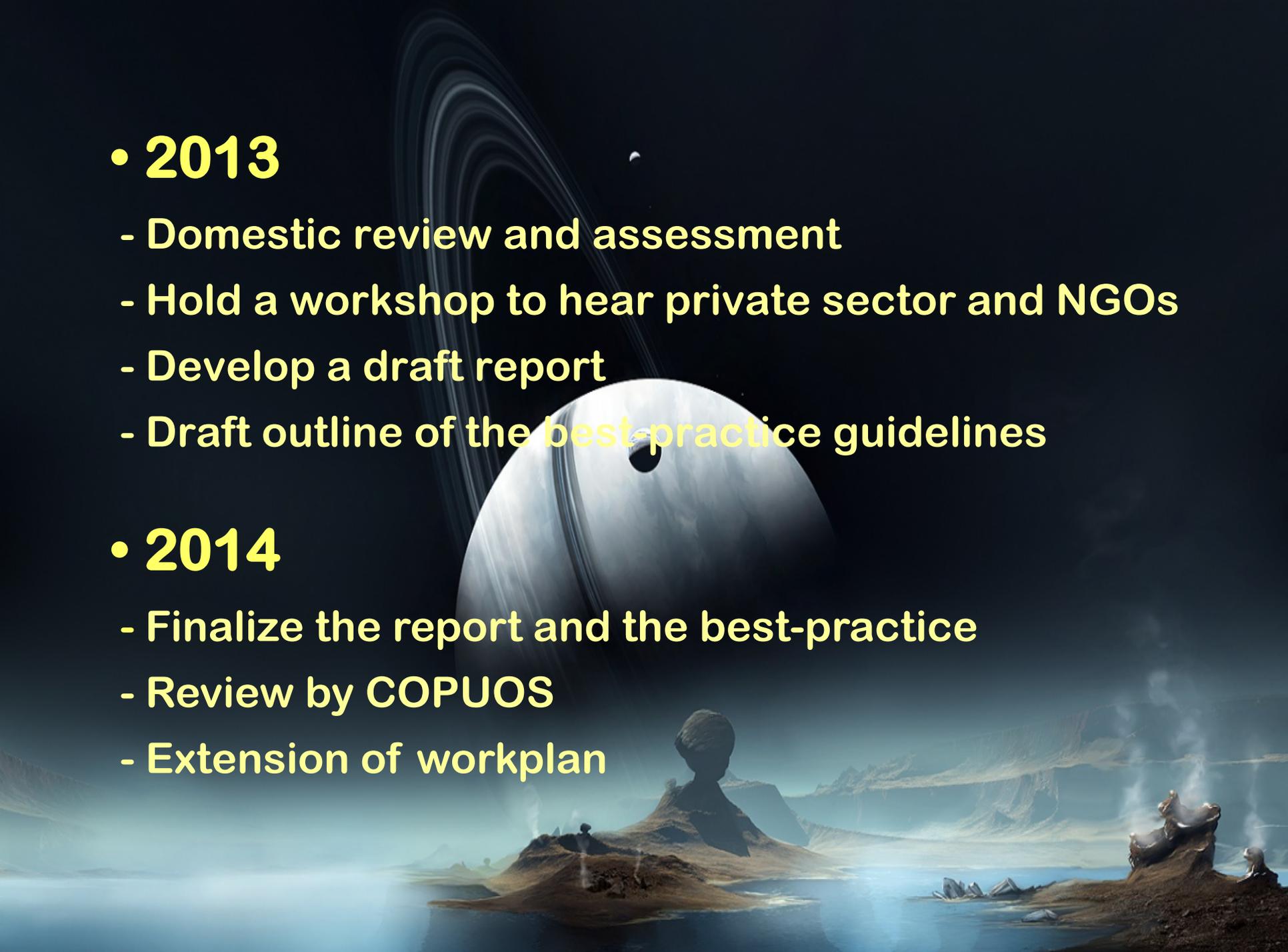
The background of the slide is a deep space scene. On the right, a large, detailed view of Earth is shown, with its blue oceans and brown/green continents. To the left, the dark, cratered surface of the Moon is visible. The sky is filled with numerous stars of varying brightness and colors, and some faint, curved light trails or nebulae are scattered throughout the scene.

## • 2011

- Develop ToR, method of work and workplan
- Establish expert groups and preliminary planning their activities
- Seek information from states and organizations

## • 2012

- General exchange of views
- Hold a workshop
- Continue gathering information and consolidation
- Draft the outline of the report



## • 2013

- Domestic review and assessment
- Hold a workshop to hear private sector and NGOs
- Develop a draft report
- Draft outline of the best-practice guidelines

## • 2014

- Finalize the report and the best-practice
- Review by COPUOS
- Extension of workplan

# Concerns and Worries

- **coordination or duplication**
    - IADC
    - Governmental expert group on outer space transparency and confidence-building measures
    - Space Weather Initiative
    - EU Space Code of Conduct
  - **Equal access vs new technical barrier**
  - **Military trump all**
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# Are We Ready for the Topic?

- How to define sustainability?
  - on earth
  - outer space
- Is there any other entry point?
  - environmentalism
  - sustainable development
  - Global governance

*thank you!*